

The Manitoba Medical Review

Vol. 35

DECEMBER, 1955

No. 10

Surgery

Surgery — 1955

Robert L. Cooke, M.D., F.R.C.S. Eng. & Can.

The outstanding feature pervading the history of surgery is its continued growth. This growth is neither steady nor obvious at any given time and reporting recent advances is necessarily inaccurate. The reporter commits errors of omission and commission. Only time and experience will prove the merits and demerits of this year's contributions.

Injury

The United States Army Surgical Research Team in Korea has published an excellent collection of papers on many aspects of injury in the March and April issues of the Annals of Surgery. War has always provided unique experiences for medical science and the Korean war was no exception. The authors report their experience with massive transfusions, including indications, complications such as anuria, and results. Their service experience with arterial injuries is reported and improved results are noted compared to World War II. These papers on arterial injuries should become classics in their field. The Army Research Team devoted much attention to surgical physiology. Papers reporting studies on adrenal function under stress, glucose metabolism, hypertensive response, plasma amylase activity, gastric and salivary secretions, and the haemostatic response after injury are all presented. An interesting study on plasma expanders for wounded men demonstrated less disturbance of hepatic function than in similar casualties treated with stored citrated blood. Bacteriological studies on wounded men are reported. Studies of blood stream and wound contamination were made, and infection has not been proven an important factor in primary shock. Circulatory homeostasis after massive injury was studied by this group. V.D.M. and V.E.M. assays were done on battle casualties. No positive correlation between the occurrence of traumatic shock refractory to transfusion and the titer of V.D.M. and V.E.M. was found. Similarly the development of post-operative hypertension could not be related to the V.D.M. - V.E.M. titers.

It is the reporter's opinion that these papers from the United States Army Surgical Research Team have added a large body of facts to our knowledge of injury, stress and shock. These subjects have long been burdened with theory and it is pleasing to report to you this body of factual data.

Abdominal Surgery

During the year a number of papers have appeared on the association of melanin spots on the epithelium and intestinal polyps. This was first reported by Peutz in 1921 but little was reported on the syndrome until recently. The pigment deposits appear on the oral mucosa and sometimes on the palms and soles. The polyps are in the small intestine and gastric and colon polyps may be present. This syndrome is transmitted as a Mendelian dominant characteristic. One concludes that the profession has been under-diagnosing the syndrome in the past and that any patient exhibiting the typical abnormal pigmentation deserves a complete study for intestinal polyps.¹

An interesting surgical experiment on free mesothelial grafts in the treatment of intraperitoneal adhesions is reported by Carver.² Whether any clinical application and advance in surgery will come of his work is not yet determined. The paper merits reading by anyone interested in setting up a small project in a surgical research unit. The evidence presented supports the view that free autogenous mesothelial grafts did decrease adhesions.

Lichenstein and Herzikoff³ report a technique for treating recurrent ileostomy prolapse. This problem has bedevilled surgeons for years. They had a youth with recurrent severe prolapse. This recurred despite construction of a new stoma and later anchoring the terminal ileum to the parietal peritoneum. In desperation they did a modified Nobel plication procedure and did not again revise the stoma. The patient has had no further recurrence during the year and one-half follow-up compared to three episodes in the sixteen months prior to the plication.

The cure rate of cancer of the gall bladder has remained negligible since the first reported series. The occasional patient who had a cholecystectomy for stones and was found to have an early unsuspected tumor has survived. Pack et al⁴ report on a new surgical attack on this disease. They discuss the disease, its spread, its unsatisfactory treatment to date, and they present three patients on whom they have done total right hepatic lobectomy. Two of the three patients have done well in the short period since operation. The details of surgical technic are presented and the pre-and post-operative care discussed. In interesting comparison to Pack's paper one should read the editorial by Janes, cautioning the advocates of surgery in cancer therapy.⁵

Our attention is redirected to abdominal epilepsy as a cause of severe paroxysmal abdominal pain.⁶ One suspects that surgeons seldom include this in the differential diagnosis of the acute abdomen. Such a diagnosis can be reached by the absence of organic abdominal disease, by the abnormal E.E.G. and the effectiveness of anti-convulsant therapy.

Vascular Surgery

This year's surgical literature abounds in reports on vascular surgery. Shumway et al⁷ report an interesting experiment in which they constructed and used vessel grafts from polyvinyl sponge. This method has certain advantages, the material is readily available, and any size and shape can be obtained. Their experimental work on fourteen dogs indicates the technic is valuable and merits further application. In their series only one dog had thrombosis. The authors suggest this technic may be applied to other sites such as the trachea and bronchi.

Valuable follow-up studies on experimental vena cava autografts are reported by Nabatoff et al.⁸ Long term study is necessary to assess the many types of vessel substitution now available. These authors report on the late results of cases wherein the abdominal aorta of each of nine dogs was replaced with a segment of vena cava. Their animals remained well and the grafts patent. Ballooning occurred in all cases and they conclude that the procedure has merit but external buttressing should be routine.

Griffiths and co-workers¹⁰ report that long term experience with arterial homografts suggests the results are unsatisfactory. For this reason he has been investigating the use of vynylon-N-plastic cloth. Studies with thirty-two animals are reported. The authors conclude that a graft of vynylon N supplemented with a longitudinal strip of autogenous artery, which grows circumferentially, may be preferable to homografts for long term success.

Low Temperature Preservation of Tissues

Surgeons are making increasing use of tissues which have been preserved at low temperatures for long periods. Perhaps basic research on this method of preservation has lagged behind clinical applications. Heard¹¹ reports a study on the storage of various tissues at low temperatures. In order that the best methods of freezing and thawing be learned, such work as he reports is necessary. He has evolved methods of making permanent preparations of frozen tissue by which the amount of ice crystal formation can be judged. Further work may add to our knowledge of the effect on cells and on cell survival by the various methods of preservation.

Urinary System

All surgeons know of the remarkable regenerative ability of the bladder. Bohne et al¹² report an amazing series of experiments on dogs in which an entirely new bladder is grown. The entire bladder was removed and a mold placed in the site. A regenerated pouch lined with transitional epithelium and containing smooth muscle in its wall was obtained. A number of the dogs have been continent and good renal function has been preserved. When one considers the poor results of invasive bladder cancer, the trials and tribulations attendant on skin and bowel ureteral transplants, one must be most interested in this unusual report and the clinical applications which may be developed.

Cancer

The Canadian Medical Journal of Oct. 15, 1955 presents a symposium on cancer which is recommended reading for all of us. The conclusions after reading the whole is that a knowledge of the natural history of cancer is basic for anyone treating cancer. The biological activity of the tumor and the resistance of the host are the important factors in determining prognosis. This is an oft repeated cliche and can not be used as an argument for denying treatment, as is sometimes done. It is an argument for the careful consideration of type of treatment and the careful selection of treatment for each case.

The Bulletin of Cancer Progress of Sept., 1955, contains a report by Hamilton on cancer chemotherapy and the structure of nucleic acids. We have been using the antagonists of folic acid in chemotherapy of the leukemias without understanding the true role of folic acid. It is known now that the folic acid antagonists prevent synthesis of several amino acids and pyrimidines, essential constituents of nucleic acids. Evidence is accumulating that antifolics affect the nucleic acids of the genes. The increased understanding of nucleic acid metabolism promises well for the development of specific chemotherapeutic agents for cancer. It is possible that molecules will be tailored to displace specific portions of the D.N.A. macromolecule in the chromosome.

References

1. Ann. Surg., 141: 5, p. 664.
2. S.G.O., 100: 2, p. 163.
3. Ann. Surg., 141: 1, p. 95.
4. Ann. Surg., 142: 1, p. 96.
5. Ann. Surg., 142: 1, p. 134.
6. Sandoz, J.M.S., 11: 2, p. 66.
7. S.G.O., 100: 6, p. 703.
8. S.G.O., 101: 1, p. 20.
10. S.G.O., 101: 2, p. 225.
11. B.J.S., XLII: 174, p. 430.
12. S.G.O., 100: 3, p. 259.

Progress in Thoracic Surgery—1955

L. L. Whytehead, F.R.C.S.

This short summary can only mention a small number of the notable reports made in this period and is confined to clinical applications.

It is just over 10 years since the introduction of antituberculous drugs and the consequent progress in treating pulmonary tuberculosis has been reviewed by Adams¹. A reduced mortality and a greater proportion of good results after surgical treatment is noted, together with the development of modified permanent collapse measures, using prostheses, and the swing to resection of the disease. Improved surgical technique and pulmonary function tests can share the credit.

Seven years ago, the renaissance of the operative treatment of Mitral Stenosis began and the history of this treatment is told from its beginning by Meade². Glover et al³ and Ellis and Harken⁴ review their work in this field. They agree that the chief reason for deterioration after initial improvement is an inadequate surgical enlargement of the narrowed valve, either from technical inexperience or from the pathological condition, or coexistent aortic valve disease. They find no evidence for recurrence of the stenosis in the absence of further rheumatic valvulitis. The post-operative changes in the physical signs of stenosis are variable and do not reflect the improved cardiac function in successful cases: these constitute some 75% of patients selected for operation. Although the risk that operation will precipitate systemic emboli from the left atrium in patients who have had previous emboli is 25-30%, such patients after operation stand a much smaller risk of recurrent emboli as compared with patients not having mitral valvotomy after an initial embolus; this is confirmed by Warren et al.⁵ Baronofsky⁶ reports five cases re-operated on for mitral disease; two of these had severe mitral regurgitation at the first operation but two and three years later, each had developed a tight stenosis, the change being accompanied by increasing right axis deviation in the electrocardiogram.

Many further statistical studies have appeared to support a relationship between cigarette smoking and Bronchogenic Carcinoma but Berkson⁷ points out that there is practically no pathological or clinical evidence to support the statistical evidence. He gives reasons for supposing that the sample populations studied are not representative of the population at large owing to unrecognised selection instead of truly random sampling. McBurney et al⁸ report a series of asymptomatic bronchial carcinomata; although all were resectable, half by lobectomy, there was a high incidence of mediastinal lymph node involvement and survival was no better than in symptomatic cases. This may well be explained by the gross delay

between radiological diagnosis and referral for treatment. Dunn⁹ surveys the true increase in this disease which, in U.S. males, has been 12-18% per year in the period 1930-1950; although the rate of increase is falling off, the total incidence will continue to increase and in absolute numbers will probably double the present before levelling off. Lindskog and Hubbell¹⁰ and Ginsberg et al¹¹ report each a series of patients treated surgically for Bronchiectasis. The disease is bilateral in some 35% of patients, though not necessarily severe enough on both sides to justify two operations. Each report an incidence of atelectasis requiring bronchoscopy after resection of 20-25%. The mortality is 2-4% and good results are obtained in 70-75% of patients treated surgically, a much better proportion than in patients managed medically even when those unfit for operation are excluded.

Scanlon et al¹² report a survey of patients with carcinoma of the oesophagus and conclude from microscopic examination of the resected specimen or of recurrences at the site of the reconstructive anastomosis that the length of oesophagus resected is inadequate in at least 45%. Longer excisions, except in the lower third, are likely to entail reconstruction of the alimentary tract at a second stage. Carey and Clagett¹³ report a large series of carcinoma of the lower portion of the oesophagus and of the cardia. Only slightly more than half the patients seen were thought suitable for operation and again nearly half could not be resected. Three-quarters of those resected were adenocarcinomata of the cardia, but spread to the regional nodes was less common in epidermoid carcinoma of the lower third; indeed the survival of those with epidermoid growths was considerably better, whether or not the nodes were involved. Adams¹⁴ and Shedd¹⁵ give figures which support the well-known fact that the higher the level of growth, the worse the prognosis.

The difficult problem of reflux oesophagitis is considered by Stewart et al¹⁶. Upward displacement of the cardia of the stomach is much the commonest cause, but this is often sliding, not fixed. Most patients can be managed satisfactorily by medical measures with, perhaps, dilatation as well, but they urge early resort to surgical repair if symptoms are not relieved or if evidence of oesophagitis persists, to prevent the development of a stricture. They advise partial gastrectomy in addition, if the diaphragmatic repair is technically unsatisfactory or if an oesophageal stricture must be resected. Harrington¹⁷ summarizes his large experience with Hiatal Hernia, and points out that it is the large herniae which develop complications and less than 25% of all such hernia need repair. His mortality is 1.3%, and his recurrence rate less than 3%. Although he advises an abdominal approach, he avoids other abdominal

procedures at the same time, if possible. Sprafka et al¹⁸ believe that such herniae tend to enlarge and that repair is then indicated to forestall complications.

The most striking progress in Thoracic Surgery has been left till last, namely the advances in the surgical treatment of heart disease. Much progress has been made in the development of closed techniques for repair of Atrial Septal Defects, with the help of touch sensation from a finger in the right atrium. Bailey et al¹⁹ report a large series with apparent good results in the Ostium secundum type; however, the mortality in the Ostium primum type is high. They aim to separate the systemic and pulmonary venous circulations and this does not necessarily entail closure of the defect. They believe that, if the pulmonary blood flow is double the systemic as a result of the shunt of blood from the left atrium to the right, surgical treatment should be advised. If anomalies of the pulmonary venous drainage exist, they can often be corrected at the same operation. Kay et al²⁰ agree with Bailey that reversal of the shunt contraindicates attempted closure and they also do not advise it when the arterial oxygen is less than 85 volumes% or the pulmonary hypertension more than 75 mm. Hg. They take heart size, impaired cardio-respiratory reserve, age, pulmonary radiological appearances and duration of symptoms into consideration in assessing these patients. Cooley²¹ has used a modification of Bjork and Crafoord's technique.

On the other hand, many groups argue that an open, dry heart offers the only satisfactory approach to the closure of the septal defects, especially those of the interventricular septum. Lillehei et al²² have attained this objective by the use of a donor to provide the patient with sufficient circulation, (about 30% of the resting cardiac output), so that the patient's heart may be excluded from his circulation for periods up to 40 minutes. By this method, they have had gratifying success

in the surgical closure of ventricular septal defects both isolated and in combination with pulmonary stenosis (Fallot's Tetralogy), the stenosis being corrected at the same time. Such repair of these two anomalies has not previously been possible.

Many advocates of open, visual techniques rely on hypothermia for cardiotomies; the hypothermia permits occlusion of the circulation to be prolonged to 8 minutes. Swan et al²³ use this method for repair of congenital heart anomalies which can be approached through the right atrium or ventricle and their results in the correction of isolated pulmonary stenosis and the ostium secundum type of atrial septal defect have been most satisfactory. However, the repair of ventricular septal defects, the ostium primum type of atrial septal defect and the anomalies of Fallot's tetralogy are too lengthy for this technique, for occlusion of the circulation for more than 8 minutes or cooling below 26°C. causes a considerable increase in the incidence of ventricular fibrillation. Lewis et al²⁴ emphasize that the use of hypothermia to allow repair of atrial septal defects is much simpler than the method of cross-circulation although it allows less time. They also do not cool below 26°C and their results too have been very encouraging.

References

1. Surgery (1954), 36: 1027.
2. Surgery (1955), 38: 432.
3. Circulation (1955), 11: 14.
4. Circulation (1955), 11: 637.
5. Ann. Surg. (1954), 140: 311.
6. Ann. Surg. (1955), 142: 32.
7. Proc. Staff Meet. Mayo Clin. (1955), 30: 319.
8. Ann. Surg. (1955), 141: 84.
9. J. Int. Coll. Surg. (1955), 23: 326.
10. Surg. Gyn. Obs. (1955), 100: 643.
11. Surg. Gyn. Obs. (1955), 101: 99.
12. Surg. Gyn. Obs. (1955), 101: 290.
13. Ann. Surg. (1955), 142: 2.
14. Surg. Gyn. Obs. (1955), 100: 366.
15. Surg. Gyn. Obs. (1955), 101: 55.
16. Ann. Surg. (1955), 141: 627.
17. Surg. Gyn. Obs. (1955), 100: 277.
18. Surgery (1955), 36: 519.
19. Ann. Surg. (1955), 140: 805.
20. Surgery (1955), 38: 323.
21. Surg. Gyn. Obs. (1955), 100: 268.
22. Surgery (1955), 38: 11.
23. Ann. Surg. (1955), 142: 382.
24. Surgery (1954), 36: 538.



Children like its orange-peach flavour

infantol
The multi-vitamin for children

FRANK W. HORNER LIMITED

Orthopedics

Recent Advances in the Treatment of Scoliosis

B. E. Loadman, B.A., M.D., Ch.M.

The treatment of progressive scoliosis, idiopathic or paralytic, has always been discouraging and expensive for the patient, and laborious for the surgeon. Recent improvements in the technique of correcting the deformity and in surgical fusion of the spine offer encouragement to both.

For many years the turn-buckle cast was the most widely used method of correcting the deformity. With this, the surgeon attempted to swing both ends of the primary curve into line with the apex, by the use of hinges and a turn-buckle on a large body cast, which usually had to be extended down to the knee. When the correction of the curve was as complete as possible, a large window was cut in the back of the body cast, through which the fusion operation could be carried out. In Winnipeg this has generally involved the use of cortical grafts from the tibia, sometimes grafts from the bone bank, but not a fusion of the articular facets.

Although the turn-buckle cast often produced good correction of the primary curve, pressure sores were common. Because of the weight and bulk of the casts, the patients were confined to bed for months and the nursing problem made institutional care a necessity. As the work involved in making these plaster jackets was heavy and tedious, surgeons, being human, were often reluctant to undertake treatment until the deformity was unnecessarily severe.

Dr. J. Risser, who introduced the turn-buckle cast, demonstrated a new corrective technique at a meeting of the American Academy of Orthopaedic Surgeons in January, at Los Angeles. The principle of this technique is to push the apex of the primary curve into line with the upper and lower ends of the curve, and to hold it in this corrected position by a thinly padded, well molded body cast. He has developed a special frame which allows strong traction to be applied to the pelvis and head, thus straightening the compensatory curves and to some extent the primary curve. While the traction is being applied, localized pressure is made over the apex of the curve by means of an adjustable jack screw. This pressure is made on the ribs from a postero-lateral direction. The cast is applied in sections and when complete extends from the occiput to the pelvis. If a post-correction x-ray film, taken through the cast, indicates that the primary curve has been adequately straightened, a large window is cut in the back of the cast and the patient is ready for surgery the following day. Dr. Risser performs a

fusion of the entire primary curve and as many segments above and below as he considers necessary at one operation. He does this by destroying the articular facets of these vertebrae, and by interlacing grafts turned up with a gouge, from the spinous processes and laminae of adjacent vertebrae. No bone is added from the patient or bank, as he considers this is unnecessary. The patients are allowed up as soon as they have recovered from the operation, and leave the hospital in two weeks. The cast, of course, is worn for many months until the fusion is solid.

The advantages of this method, as compared to the turn-buckle cast, are many. The correction secured is better, and is obtained immediately. The patient does not suffer days of discomfort while the curve is being straightened. The corrective casts are smaller, lighter, well molded to the body, and allow the patient to be ambulatory. The correction is well maintained even with the patient upright. Institutional care is required initially for a comparatively short time and afterwards for changes of plaster only.

Recently, a few of the Orthopaedic surgeons from Winnipeg spent a week with Dr. John Moe of Minneapolis. He devotes a great deal of his time to the treatment of patients with scoliosis; few surgeons in North America have had more experience with this problem. His approach to the problem is very similar to that of Dr. Risser's and differs only in details. He uses the Risser casting table with some modifications in the application of the corrective casts, and demonstrated excellent correction of many severe curvatures. He uses an articular facet fusion with thorough destruction of these joints. In addition to the interlacing grafts from the spinous processes and laminae, he uses bank bone to reinforce the dorsolumbar and lumbar areas. These are the common sites for pseudoarthroses, and he feels that the extra bone reduces the frequency of this complication. His patients are kept in bed for six months after the fusion, but only one month of this is in hospital. In the lighter casts these children can be nursed in bed at home. He emphasized the need for careful supervision in younger children with paralytic scoliosis, and for early treatment with progression of the deformity. His work and results were very impressive.

Through the courtesy of the Shriners' Hospital and Dr. K. McGibbon, the Risser casting table is now available to the orthopaedic surgeons in Winnipeg who are interested in this problem. It is hoped that by its use the future may be brighter for the children of Manitoba who require corrective treatment for scoliosis.

Ophthalmology

The Hundredth Anniversary of the Laryngoscope

K. J. Austmann, M.D.

The laryngoscope is defined as "an apparatus for the ocular examination of the larynx". Today this is one of the simplest of our instruments—an enlarged dental mirror with a hooded electric light beam attached to the handle. Yet it was a long time coming. And one is inclined to wonder why the labour of its birth was so long and tedious.

It is not easy for us in this, our highly illuminated age to realize the difficulty that our forbears had to contend with in trying to peer into the various canals and orifices of the human body to see what was in them. But when we recall that the sun, when available, lamps, burning complex, crude animal and vegetable oils and fats, or candles burning complex tallow were the only sources of light available, the slowness of the progress is more easily understandable. It was largely a matter of light.

Undoubtedly geniuses here and there down the centuries invented, probably quite good illumination—even recorded it—but the record fell on stony soil and failed of germination, as witness Da Vinci's lamp. This extraordinary man found daylight hours too short. The olive oil lamp burned with a dull, flickering light which annoyed him. He added a chimney in the form of a glass cylinder, fitted into a glass globe filled with water. The flame burned steadily and, through the lens action of the globe of water which surrounded it, it was brightly lighted.

You may recall that the ancients were acquainted with mirrors, and with the burning glass, but had rather peculiar ideas about optics. The Pythagoreans believed in an emission theory, supposing that the seen object emitted particles which bombarded the eye. (An astonishing approximation to the corpuscular factors in the electromagnetic theory of light of today.) But the Platonists held that vision was produced by the triple interaction between rays emitted by the sun, the object viewed, and by the eye itself. In 1490 when Da Vinci invented his lamp, the world had not advanced much further. This makes it the more remarkable that Da Vinci recognized that seeing had two component parts, viz., "light" and "vision". This is shown by the fact that he devised water glasses for correcting near vision. His is the first recorded analysis of "seeing" as composed of these two elements.

But these discoveries were lost sight of.

The dentist's mouth mirrors were already in use since Roman times. Celsus, writing in the

early years of the Christian era, mentions "specillum" which is supposed to refer to specula oris, but which Virgil regarded as surgeon's probes. However, among surgical instruments, dug up at Pompeii, dating prior to 79 B.C., which now form part of the Victor Merlo collection in the Los Angeles Museum, there are two instruments that look very much like the modern dental mouth mirror, one long handled, the other shorter. From the illustration of them in Lufkin's History of Dentistry, they seem to lack the angular setting from the handle, suggesting they were used for illumination only.

In 1743 M. Levret, a distinguished French obstetrician, of remarkable ingenuity and inventiveness set himself to finding means of tying off polypoid growths in the nose, throat, ear and other orifices of the human body and at the same time seeing what he was doing. He invented a speculum oris of different design. It consisted, in the main, of a plate of polished metal, the **plaqué polie** which "reflected the rays (of light) in the direction of the tumour" and at the same time received the image of the tumour on its reflecting surface, thus facilitating the application of the ligature. This also appears to have been lost sight of.

In London, Bartelomeo Ruspini, an Italian dentist who practiced his profession for thirty years, and was patronized by all the great personages of the kingdom, including Royalty, in 1768 published "A Treatise on Teeth". This ran through eight editions, the last in 1797. He is especially remembered for his invention of an improved mouth mirror, a new means of dental examination. And, I gather, this is the mouth mirror that has since come into universal use.

In 1804 - 1807 Dr. Bozzini of Frankfort am Main caused quite a sensation in Germany with his "light conductor". This consisted of a speculum of bright metal, with a vertical central partition, curved at the distal end with two small mirrors, one for each side of the partition and set at about 45° to the line of the speculum. This speculum was attached to a metal chimney which had two openings opposite each other. The larger opening was for the attachment of the speculum to this chimney, the other was for looking through, and could be fitted with an eye piece. This chimney was attached to a vase shaped body or lantern which contained a candle, the light of which was just below the line of vision in looking through the eye piece into the speculum. The specula were made of various sizes according to the size of the cavity or orifice to be examined. The base of all these specula were of the same size to fit into the hole in the chimney. This, then was a sort of

lantern, lit by a candle. The speculum and chimney portions were of polished tin or silver. To me the most interesting feature is that it was double barrelled, each barrel with its own mirror. One mirror was to reflect the light onto the part being examined in a cavity, the other was to pick up the image and reflect it into the eye. The inventor seemed unaware that one mirror could do both as in M. Levret's instrument.

A similar double tubed instrument was constructed by a patient of Dr. Bennati of Paris in 1832, one tube to introduce the light into the glottis, the other to convey the image to the observer. The problem was evidently anything but simple.

In 1825 M. Cagniard Latour, of the French Academy of Sciences, an earnest investigator of the physiology of the voice, made an unsuccessful endeavour to examine the larynx during life.

In 1829 Dr. Benjamin Guy Babington exhibited at the Hunterian Society of London an instrument closely resembling the modern laryngoscope. This had two mirrors, a smaller one for receiving the laryngeal image and a larger one for concentrating the rays of the sun on the little mirror. The patient sat with his back to the sun. The idea was basically right—the essential optical train was there, but any instrument based on direct sunlight in London would have little emergency value.

Thus there were several who came very close to the solution. In 1838 M. Baumes exhibited at the Medical Society of Lyons a mirror about the size of a two franc piece, which he described as very useful in examining the posterior nares and larynx.

In 1840 Liston in his Practical Surgery, in dealing with edematous tumours that obstruct the larynx states as follows: "The existence of the swelling may often be ascertained by careful examination with the fingers, and a view may sometimes be obtained by means of a speculum, such glass as is used by dentists, on a long stalk, previously dipped in hot water, introduced with its reflecting surface downward and carried well into the fauces". But it was effective only "sometimes"—one may surmise the difficulty was illumination.

In 1844 Mr. Avery of London came very close—but did not place his invention on record until 1862—some time after the modern laryngoscope had come into use. He invented a laryngoscope, the principle of which was very close to the modern. He used a reflector attached to a frontal pad and held in place by two springs attached to an occipital pad. But he used a speculum with the laryngeal mirror attached to it. He used the large frontal mirror to increase the luminosity of a candle held near the patient's mouth. MacKenzie criticizes this procedure, suggesting he should have used a lamp placed on a table, or elsewhere, but I

wonder whether MacKenzie has not overlooked the sources of illumination available to Mr. Avery. The oil lamps of the day were crude. The Argand lamp, patented in 1784, had a circular wick, and a chimney was provided to direct and regulate the flow of air to the flame. In 1800 this was improved by Garcet who added a clockwork pump for raising and feeding the crude animal, fish or vegetable oils then available to the wick, as these were too sluggish to come up by capillary action fast enough. It is doubtful whether such a lamp was available to the run of the profession at that time.

Gas had been in considerable use for lighting streets and some factories, but it was considered dangerous and ineffective, and this prejudiced very much its adoption for lighting in homes and offices.

Petroleum was not discovered until 1859, by E. L. Drake, four years after the invention of the laryngoscope. Because of its physical properties and its high degree of lighting efficiency, and its cheapness it very soon superseded the crude oil in lamps. Thus Avery's use of the candle was simply the use of the handiest portable means of illumination available to him. This, I think, MacKenzie possibly overlooked, as coal oil and gas were easily available in the eighties when he wrote.

Manoel Garcia was born in 1805. He celebrated his hundredth anniversary in London March 17th, 1905. He died in 1906. He was born in Madrid, the son of a Spanish tenor and composer of light opera, also named Manoel Garcia, who became most famous as a teacher of singing in London and Paris. He died in Paris when his son Manoel Garcia II was twenty-seven. As a teacher of singing this son became no less famous than his father. But his outstanding contribution was his invention of the laryngoscope.

He was not a physician or a dentist, but he was much interested in how voice was produced and how the vocal cords behaved during the act of breathing and of phonation. Prior to 1854 he had toyed with the idea of using mirrors to study the interior of the larynx during singing, but believing it impractical, had never attempted it. However, in 1854 he began to try, with mirrors. He was quite unaware that anything like it had ever been tried before. He used himself as a subject.

His efforts were successful and in 1855 he presented a paper to the Royal Society of London, entitled "Physiological Observations on the Human Voice". This paper gave an admirable account of the action of the vocal cords during breathing and vocalization. There were also some very important remarks on the production of sound in the larynx, and some valuable reflections on the production of chest and falsetto notes. All his investigations were carried out on himself, and thus he also became the first person to conceive the idea of an autoscopic examination.

Thus, he not only invented the apparatus, but made new and valuable discoveries with it. But he did not develop the clinical uses of the apparatus in the study of disease. This was done by Turk in Vienna two years later, when Garcia's paper came to his notice.

Garcia's source of illumination was the sun. In his paper he directed that the person being examined should face the sun so that a little mirror attached to a long handle, suitably bent and applied to the top of the pharynx and directed downward would reflect the rays down into the glottis and the image back to the observing eye. But he added a footnote, that, if the observer experimented on himself, he should use a second mirror to reflect the sun's rays on the little mirror, sitting then with his back to the sun. In point of fact, Garcia always used a second mirror so placed in front of him, that it reflected the sun's rays onto the little mirror, and the image from this, again, he viewed in this same sun-reflecting mirror.

Garcia's paper caused little stir in London. He was concerned only with the physiology of the larynx, and evidently the medical profession missed the implications of his findings, if they did not frankly disbelieve him. It was left to the Vienna School to bring out its clinical potentialities.

In 1857, during the summer months Dr. Turk of Vienna endeavoured to use the laryngeal mirror in the wards of the General Hospital in Vienna.

In November of the same year Professor Czermak of Pesth, a Bohemian, commenced work with Dr. Turk's laryngeal mirror and soon solved all the difficulties. Artificial light was used instead of the uncertain rays of the sun, and the large ophthalmic mirror of Ruete was used to

concentrate this source of light on the laryngeal mirror, and mirrors of different sizes were used in the pharynx.

Thus Garcia invented the laryngoscope, but it was left to Czermak to create and develop the Art of Laryngoscopy.

Czermak published his initial communication in March of 1858, Turk published his in June of the same year. In the same year the laryngoscope appears to have been brought to the American Continent by Ernest Krackowizer, late of Vienna. You will note the speed of spread; Garcia 1855, Czermak 1858, Krackowizer to America the same year, 1858. This draws attention to another great factor in the slowness in the development and diffusion of knowledge. That is the revolution in communications of all kinds that were taking place. Before 1800 there were very few Medical Journals. The Lancet first appeared in 1850. The British Medical Journal not until 1859. And before the early eighteen hundreds there were only horses and sail ships to deliver them. When these facts are kept in mind, it is not difficult to understand why Garcia had no knowledge of previous attempts at the invention of the laryngoscope. But even as Aphrodite rose full blown from the foam of the sea so the laryngoscope arose full blown through the curiosity, energy, and drive of the brain of Manoel Garcia II.

He invented the laryngoscope, but what set his invention apart from the many near misses was that he made valuable observations with it that had not been made before, and published his results in a Scientific Journal, which was speedily disseminated far and wide.

References

1. Proc. Royal Soc. of London, Vol. VII, No. 13, 1855.
Also Gaz. Hebdomad, de Med. et Chir., Nov. 16, 1855.
2. Morrell MacKenzie: Pharynx, Larynx, and Trachea., 1880.
Wood, New York.



Children everywhere like it

infantol
The multi-vitamin for children

F R A N K W . H O R N E R L I M I T E D

"Problems of the Newborn Infant"

A series of case reports and commentaries from the files of the Winnipeg General, St. Boniface and Children's Hospitals, illustrating factors which affect the survival of the infant during his first week of life.

SERIES VIII

Foetal Distress

A. C. McInnis, M.D., M.R.C.O.G., F.R.C.S. (C)
Assistant Obstetrician-Gynaecologist,
Winnipeg General Hospital

With the increasing interest in resuscitation of the newborn, one would expect that there would be greater attention given to the recognition of foetal distress. This does not appear to be the case. We are all familiar with the picture of the severely asphyxiated infant. The main features are flaccidity usually with a slow faint heart beat. At some time at the termination of labour or during delivery, a change has occurred to produce this state and in a surprising number of cases, this change is not recognized.

The foetal heart sounds are the best guide to the recognition of foetal distress. While in the labour room they are, as a rule, watched with great care. In the voyage to the delivery room and during the preparations for delivery, auscultation of the foetal heart is less frequent. In all too many cases, when a drape is placed over the abdomen, observation of the foetal heart ceases, and we have lost contact with the foetus during the final, often perilous, period in utero. If there is for one reason or another, some delay in delivery, this period of time may be prolonged to thirty minutes or longer. It is the duty of the accoucheur to make certain that some periodic observation of the foetal heart is made during this phase. This applies particularly to cases where foetal distress is more likely to occur.

The signs of foetal distress are as follows:

(a) A drop of the foetal heart rate from 120 to 100 beats per minute. This is a significant sign and is considered to be due to foetal anoxia. If the rate drops below 100, it should be classed as severe, particularly if coupled with irregularity. A drop in the foetal heart rate during a contraction is said to be normal if it returns to normal in 30 seconds. The fact that we observe this uncommonly may well indicate that it is a diversion from the normal physiology and should be regarded as a distress signal.

(b) A rise in the foetal heart rate to 160 or more, which is sustained for 2 hours or recurs twice. It is now fairly generally agreed that an acceleration of the foetal heart is not a sign of intra-cranial

hemorrhage. It may be related to minor degrees of anoxia, but until this is proven or disproven, it is better to regard acceleration as a prodromal sign of foetal distress.

(c) Irregularity of the foetal heart in rhythm. We have all listened to foetal hearts which have shown missed beats or other irregularities in rhythm. Following delivery it is a relief to find a steady, regular heart beat. Some factor must have acted to cause these irregularities and it must be regarded as a sign of distress.

(d) Muffling of the foetal heart.

(e) Tumultuous foetal movement.

(f) The passage of meconium. This is not considered significant in breech presentation. However it should be remembered that in this presentation foetal distress is more likely to occur and the passage of meconium should not always be accepted as normal.

There are certain circumstances where foetal distress is more likely to be encountered. A few of these merit some discussion.

1. Delivery of a twin pregnancy. Following delivery of the first twin it is possible for the placenta, or that portion of the placenta supplying the second twin, to be sheared off by retraction of the uterus. This of course leads to asphyxia of the twin still in utero. Hence, in the interval between delivery of the first and second twin, it is important to not only establish the lie, presentation and position of the second twin but watch its condition. This may be done by simple auscultation of the foetal heart. Any distress may call for immediate delivery by for example internal version and breech extraction.

2. Prolonged labor. In these cases, it is particularly important to follow closely the condition of the foetus. This applies particularly to cases of hypertonic inertia. Signs of foetal distress may dictate that the labor be terminated by caesarean section to save the life of the child. In fact, not infrequently it may be too late to salvage the foetus when these signs have appeared after a long labor.

3. Breech presentation. The incidence of cord prolapse is increased particularly in the complete and incomplete as opposed to the frank breech presentation. This complication should be watched for especially just after rupture of the membranes. The foetal heart should be carefully auscultated, and, in fact, some perform routine vaginal examination at this stage to exclude cord prolapse.

4. Prolapse of the cord. In any case of foetal distress where there is no obvious cause, this condition should be excluded. A vaginal examination

should be performed and if the cervix is sufficiently dilated, the lower uterine segment may be explored to exclude occult cord prolapse.

The following case reports are three instances of foetal distress which occurred at the Maternity Pavilion, Winnipeg General Hospital in recent months.

1. Mrs. J. K. Age 18. Primigravida. Normal prenatal course. Admitted at term with ruptured membranes. The foetal heart rate was normal during the first 14 hours of labor. Then it abruptly slowed to 100 - 110 beats per minute. This persisted with the rate varying between 100 and 120. At times it was irregular. A constant rate of 118 was maintained with the patient on her right side. After 10 hours, a rectal examination showed the cervix to be 3 fingers dilated, and a cord was felt running over the foetal head. A lower segment caesarean section was performed and a living male infant weighing 8 pounds, 1 ounce delivered. The cord presentation was confirmed at operation.

2. Mrs. I. J. Age 39. Primigravida. Expected date very indefinite. Admitted because of loss of small, dark, blood clots and some elevation of B.P. up to 145/95. No albuminuria. Clinically, the uterine enlargement was consistent with a term pregnancy.

During the first 24 hours in hospital, the foetal heart was noted to be irregular at times. The lowest rate recorded was 116. After 48 hours in hospital the heart rate suddenly slowed to 90 beats per minute. This returned to normal in approximately 1 hour. On vaginal examination, the cervix was closed. In the following 16 hours the heart rate remained mainly between 120 and 140 but slowed at intervals to 100 beats per minute and was irregular at times. In view of the age and parity coupled with the signs of foetal distress, a lower segment caesarean section was performed. The cord was found low down along the side of the foetal head. There was no evidence of abruption of the placenta. This was considered to be an occult prolapse of the cord. The baby was a living male weighing 7 pounds, 3 ounces.

3. Mrs. J. C. Age 24. Primigravida. Admitted at term in labour with membranes intact. After 4 hours of labour the foetal heart rate slowed to 84 but soon returned to 110. Continued observation revealed slowing at intervals. On vaginal examination the cervix was 3 fingers dilated. Rupture of the membranes disclosed thick, meconium-stained liquor. Immediately the foetal heart sounds became inaudible but with upward pressure on the foetal head they became regular at 120. While pressure on the head was maintained, the patient was transferred to the operating room, and a lower segment caesarean section performed. A loop of cord was found low down beside the foetal head. The baby was a living female weighing 8 pounds, 12½ ounces.

These cases are reviewed to show the importance of the signs of foetal distress. The treatment was radical in each case but only after careful observation. It may well be that caesarean section should be used more frequently, if we are to lower foetal mortality in this obstetrical emergency. However, its indiscriminate use is to be condemned.

In summary it is suggested that signs of foetal distress be looked for in the delivery room as well as in the labour room. A knowledge of the significance of abnormalities of the foetal heart sounds is helpful in these difficult cases. Under certain circumstances, signs of foetal distress should be watched for closely. Every case of foetal distress requires immediate careful assessment with a vaginal examination. This must be followed by constant attention and observation.

References

Walker, J.: Jr. Obs. & Gyn. of Br. Emp., Vol. LXI, No. 2, April, 1954.
Sodenhoff and Brill: Edinburgh M.J., 61: 17-32, March, 1954.

Pædiatrics — 1955

Harry Medovy, M.D.

Professor of Pediatrics, University of Manitoba

The authors of the very successful Textbook of Pharmacology, Goodman and Gilman, complained bitterly, as they struggled through the seemingly endless task of preparing a new edition, that "a century of medical progress had taken place in a decade". This seems particularly true in regard to Paediatrics. In a matter of a few short years Meningitis has been brought completely under control, Syphilis has all but vanished, Rheumatic Fever has become a preventable disease, operations on the heart and brain have become commonplace, and surgery of congenital intestinal malformations ranging from oesophagus to anus are performed almost daily with consistent success in every Children's Hospital.

The Salk Vaccine

The year 1955 will go down in Paediatric history as the year the results of the field trials of the Salk poliomyelitis vaccine were announced to the world in a blaze of publicity and fanfare without parallel in medical experience. The careful statistical analysis of leaders in the field of Public Health indicated that the vaccine was effective for all three types of Poliomyelitis, although it was evident from the Ann Arbor figures, and was stressed by Dr. Thomas Francis that it conferred immunity in only about 60% of cases against the prevalent and dangerous Brunnhilde type as compared with figures of 80% and 90% against the relatively mild Type ii and Type iii virus. The field trials indicated that the vaccine was practically free of danger. The relatively moderate conclusions of Francis and his group were quickly forgotten by an almost hysterical rush to use the vaccine as widely as possible in the shortest possible time. Production was stepped up and vaccine was rushed to all parts of the country. Then the

blow fell. Cases of Poliomyelitis began to occur among vaccinated children and their family contacts in several parts of the United States. Live poliomyelitis virus was discovered in several batches of poliomyelitis vaccine. Faults attributable to human error and to unknown factors in production were revealed. Canada was more fortunate. Although large scale immunization programs were carried out in public schools throughout the country, no cases of poliomyelitis attributable to the vaccine occurred. At a meeting in Quebec City in June, 1955 the Committee on Control of Infectious Diseases of the American Academy of Paediatrics advised that all immunization against Poliomyelitis be discontinued. In October, 1955 the same committee advised the members of the American Academy of Paediatrics as follows:

"In view of the information made available to the Committee by the United States Public Health Service, and by others, which indicates a trend in favor of protection against paralytic poliomyelitis in recipients of poliomyelitis vaccine; in view of recent improvements in production, and in the control and testing of such vaccine, the Committee approves the resumption of vaccination against poliomyelitis in the priority age groups established by responsible authorities at state and territorial levels.

The Committee commends the continuing efforts to develop further improvements in poliomyelitis vaccines and their methods of production and control; and the continuation of careful surveillance."

There the matter stands. We have a potent vaccine. It is not without risk. Medical opinion seems to be swinging over to the side of those virologists headed by Sabin who feels that a vaccine containing live virus of known but minimal virulence will confer a more lasting immunity and carry less risk than the Salk vaccine.

Kernicterus and Prematurity

During 1955 interest developed in the problem of Kernicterus (nuclear jaundice) occurring in infants in whom no blood incompatibility could be demonstrated. In nearly every case these infants were premature babies. The occurrence of Kernicterus in erythroblastotic babies has been known for many years. With the recognition of the value of early diagnosis and exchange transfusions, repeated if necessary, this condition has become comparatively rare. For practical purposes Kernicterus in the erythroblastotic infant should be regarded as a preventable disease. The occurrence of this condition in prematures presents another problem. Beryl Corner of Bristol reported a series comprising 67 premature infants in whom blood incompatibility has been completely excluded. The main features were sudden onset on

the 4th to 7th day of lethargy, respiratory failure, vomiting and alteration of muscle tone. In fatal cases the infants died within 12 to 48 hours. Those who survived presented neurological sequelae. In Dr. Crosse's series, which were presented in Winnipeg at a meeting at the Children's Hospital, a similar picture was shown to exist. Dr. Crosse identified the condition by the occurrence of episodic opisthotonus in these infants and by characteristic eye signs referred to as "rising sun" because of the tendency of the affected infant's eyes to appear low down in the sockets. Most of Corner's affected infants were in difficulty even in the first three days of life with oedema, twitching, vomiting, or cyanotic spells indicating anoxic injury or cerebral damage of some type. All these infants recovered from these signs before the development of Kernicterus. At postmortem there was yellow staining of the brain, most intense in the basal nuclei. High bilirubin levels were found in all these infants. It was felt by Dr. Corner that some other factor mostly metabolic, was also involved in the development of kernicterus and prematurity. It is interesting to note that in a similar series studied at Babies' Hospital in New York City, Silverman and MacLean (unpublished data), report much lower levels of serum bilirubin. Where Corner's figures were always above 20 mgms.% the New York City figures were often 10-12 mgms.%. In the review of our own cases at the Winnipeg General Hospital only three such cases were encountered in the last year. In two of these Sepsis and Pneumonia were the main cause of death and in the other infant Intracranial Hemorrhage had occurred. All three infants were premature, non-erythroblastotic and showed nuclear jaundice at postmortem.

More recent communications have indicated that in one of the above groups the routine use of large doses of Vitamin K and in another group the routine use of Gantrisin were at least partly responsible. This would explain the prevalence of this condition in some nurseries while others have been completely free of it.

Cardiac Surgery

Brilliant advances continue to be made in the field of cardio-vascular surgery, especially in the infant and small child. Accurate diagnosis becomes more and more important as new palliative and curative operations are devised. The important contributions during 1955 are mainly in the surgical approaches to the interior of the heart. There has been a growing awareness of the fact that ventricular septal defects are often very serious in nature. Heart failure and death are the end result in many infants and children who have this malformation. Operations directed to closing ventricular septal defects have had to wait for the perfection of techniques which would permit performance of intra-cardiac surgery with reasonable

risk. The use of the artificial heart has been reasonably successful but the most brilliant results so far have followed the introduction of "cross circulation" techniques by the Minneapolis group, comprising Dr. Paul Adams, Dr. Morley Cohen (now of Winnipeg), and Dr. C. W. Lillehei. In this method the patient's blood is diverted through the donor, usually one of the parents, during the course of the operation, permitting the surgeon to operate in a bloodless field. 25 cases have been reported during this last year from Minneapolis. 18 of these patients survived. 7 died at the time of surgery or a few weeks following surgery. This denotes a salvage rate of approximately 70%. In the last 11 cases only 1 fatality is reported, a salvage rate of 90%. There was no mortality among the donors. The cases selected for operations were infants and children in cardiac failure and with marked growth retardation. The possibilities which lie before us, as intra-cardiac surgery becomes more and more safe for the patient, are truly wonderful. It should be remembered that cases of the Tetralogy of Fallot (in which an overriding aorta and a high ventricular septal defect along with the pulmonary stenosis and right ventricular hypertrophy comprise the deformity), could be treated by curative rather than palliative methods. This becomes apparent when one realizes that the closing of the defect in the ventricular septum would promptly eliminate not only the septal defect but the over-riding aorta and that a Brock procedure directed to overcoming the pulmonary artery stenosis would result in a curative result which is certainly a much happier situation to consider than the present palliative procedure as devised by Blalock or modified by Potts. The use of donors in the cross-circulation technique has been criticized notably by Taussig, mainly on emotional grounds and many of us would tend to agree with her. There seems little doubt that the use of donors for cross circulation will have served its purpose in demonstrating the feasibility of operating within the heart and has already saved several lives, while we have been waiting for the development of a practical artificial heart.

Placental Dysfunction

During the year a great deal of interest has been shown in the problem of fetal distress, especially in relation to placental dysfunction and postmaturity. Considerable controversy has arisen in regard to the significance of postmaturity. Walker in Aberdeen felt that postmaturity constitutes a real risk for survival of the fetus. In carefully conducted experiments which he carried out himself, he was able to show that the oxygen saturation of cord blood, which averages about 50% at term may be as low as 20 or 30% at the 42nd to the 43rd week of gestation. Where fetal distress, as evidenced by the passage of meconium into the amniotic fluid, is present, the oxygen

saturation is usually quite low in his experience. He feels that these changes tend to be more marked in primipara over the age of 25 years. He feels that labour should not be delayed after the 41st week if the fetus is alive and urges interference in primipara over 25 years of age. This view is not held universally. There is a growing feeling that the problem is really not primarily one of prolonged gestation but rather one of placental dysfunction and that other causes may lead to placental failure to continue the delivery of vital oxygen to the baby in adequate amount.

An editorial in the British Medical Journal of September 17, 1955, entitled "Foetal Distress" reviews the problem very adequately.

Outbreak of Diarrhoea in Nurseries Due to E. Coli

Outbreaks of diarrhoea in nurseries in hospitals have always constituted a serious problem. Some of these outbreaks have been of disastrous proportions. A large number of newborn infants have been involved and several deaths have resulted. Bacterial investigation in most of these outbreaks has been singularly unrewarding in the past. In most cases it has been necessary to close the nurseries for a period of time in order to eliminate the infection.

In recent months bacteriologists have been of more help in establishing the source of the outbreak and identifying the organism involved. As a result chemotherapy has become an important method of handling outbreaks of diarrhoea in nurseries.

A report from Detroit deals with isolation in 1953 of an organism, E. Coli, 0111;B.4, as a cause of an outbreak of diarrhoea in the nursery. This organism was found to be prevalent in large numbers in the stools in infants suffering from diarrhoea during this outbreak. Neomycin 100 mg. per lb. orally per day was an effective agent in clearing up the infection. Epidemics due to this organism have occurred in nurseries in other parts of the country and in Winnipeg as well. During 1954 another outbreak was encountered in the same hospital in Detroit and on this occasion the organism was found to be of a different serologic type. It has been designated E. Coli, 0127:D.8. This organism was found in large numbers of infants with diarrhoea but was also found in the nursery in infants with no manifest diarrhoea at the time.

It was felt therefore that presence of symptomless carriers served to maintain the outbreak. Neomycin in the dose mentioned above proved very effective in clearing up symptoms but did not completely eliminate the organism. It was found necessary to administer Neomycin to all the infants in the nursery whether affected or not for a period of time before the infection was com-

pletely cleared up.

This paper indicates the growing importance of bacteriological survey whenever an outbreak occurs in a nursery. It also points out that it is not sufficient to treat one child in a nursery who

is sick. In order to clear up the epidemic and prevent illness in any other infant, all infants must be placed simultaneously on therapy for several days or until cultures show the pathogen has been eliminated.

Obstetrics and Gynaecology — 1955

Leon Rubin, M.D., M.R.C.O.G.*

A. W. Andison, M.D., F.R.C.O.G.

B. D. Best, M.D., F.R.C.S.

A. S. Majury, M.D., M.R.C.O.G.†

During the past year there have been no noteworthy advances in the true sense of the word in either Obstetrics or Gynaecology. Certain subjects are to the fore, however, and are receiving close attention by clinical investigators. It is thought worthwhile to present in a necessarily brief and dogmatic form the current ideas on those topics which are being discussed at length in the literature.

Postmaturity

The question of postmaturity is one which has aroused a great deal of interest in recent years. There is a considerable difference of opinion as to whether or not the condition actually exists. Kamperman believes postmaturity is a state of mind of the obstetrician; others refer to it as a figment of the imagination. On the other hand, investigation by men such as Walker, Clifford and others has focussed attention on this condition. Among those who recognize the entity there is a difference of opinion as to what constitutes post-maturity but it is generally defined as the prolongation of pregnancy by more than two weeks past the calculated date.

The placenta undergoes a process of aging in normal pregnancy, reaching its peak efficiency just before term and then rapidly degenerating. If the pregnancy is prolonged the efficiency of the placenta may be reduced to such an extent that before or during labour the foetus may suffer from anoxia and its attendant risks. The danger from postmaturity is anoxia and not dystocia due to the undue increase in the size of the foetus. There is, in fact, often a decrease in the size of the foetus, accompanied by a decrease in the amount of amniotic fluid, as the foetus lives off its own tissues. Clifford states that postmaturity constitutes no problem to the multiparous woman but is of tremendous importance in primiparous women, one in ten losing her baby. In the older primipara postmaturity is an even greater danger. He believes that the factor responsible for the harmful effects is placental dysfunction, and that postmaturity ranks second to prematurity as a cause of foetal and prenatal wastage in the primigravida.

Martin maintains that hypertension is particularly dangerous to the foetus when postmaturity occurs.

The diagnosis of postmaturity is difficult and often unsure. The menstrual dates may be inaccurate, quickening is unreliable, the size of the baby is notoriously difficult to assess and radiological evidence is often misleading. A pelvic examination or biological test done early in pregnancy may enable one to be more sure that postmaturity has developed but even in such cases pitfalls exist.

Induction of labour at forty-two weeks or even earlier in the primigravida has been suggested as the logical treatment for postmaturity. But those who do not believe in the existence of postmaturity maintain that routine induction of labour at what is thought to be forty-two weeks will cause a great deal of unnecessary interference. Moreover, since the diagnosis is so uncertain induction will simply transfer foetal mortality from the group caused by postmaturity to the groups due to prematurity or to the hazards of surgically-induced labour. In a recent article Gibson, while recognizing postmaturity as an entity, declares that surgical induction is not the best means of overcoming its risks. He advocates that the patient be permitted to go into labour spontaneously and that if signs of foetal distress develop there should be early resort to Caesarean section. He maintains that postmaturity occurs in seven percent of cases and that in this group there is a foetal mortality of five percent. This means that foetal distress due to postmaturity may lead to only four Caesarean sections in a thousand confinements.

It is obvious that the question of postmaturity is by no means settled. There would appear to be an increasing weight of evidence that the condition does exist, that the main danger is foetal anoxia and that the foetal mortality in these cases may be reduced by induction of labour or by Caesarean section in the presence of foetal distress. On the other hand, in the absence of a more certain method of diagnosis than we now possess, routine resort to these measures will result in a great deal of unnecessary meddling and a pronounced increase in the number of premature babies, together with the risks inherent to both.

L. R.

References

- Gibson, G. B., Brit. Med. Jr., ii: 715, 1955.
- Walker, J., J. Obst. Gynec. Br. Emp., 61: 162, 1954.
- Clifford, S. H., J. Pediatrics, 44: 1, 1954.
- Morten, J. O., J. Obst. Gynec. Br. Emp., 52: 111, 1955.
- Racken, D., Burgess, C. H., Manley C., Lancet, 2: 953, 1953.
- Kamperman, C., Am. J. Obst. & Gynec., 56: 170, 1948.

*Mall Medical Building, Winnipeg, Manitoba.

†Winnipeg Clinic, Winnipeg, Manitoba.

Afibrinogenaemia

It has been recognized for a considerable time that in some cases of abruptio placentae there may be persistent uterine bleeding after delivery. In 1945 Dieckmann called attention to this occurrence and pointed out that there may be failure of the blood to clot. He suggested hysterectomy as a means of dealing with the situation. A number of articles dealing with this problem have appeared during the past two years. It appears that the haemorrhagic diathesis in these cases is due to the release of thromboplastins from the uterus or its contents into the maternal circulation. The normal blood coagulation process is thereby initiated; the thromboplastins permit the activation of prothrombin into thrombin, which in turn enables the soluble protein fibrinogen to be converted into insoluble fibrin. Intravascular clotting occurs and the amount of circulating fibrinogen is seriously diminished. The same train of events may be set in motion following amniotic fluid embolism and in cases of delivery of a foetus which has died ante partum as a result of Rh incompatibility and has been retained a considerable time in utero.

There is evidence that hypofibrinogenaemia may be due also to an excess of fibrinolysin, an enzyme possibly derived from capillary endothelium under conditions of stress or in the presence of shock.

In a series of cases of hypofibrinogenaemia reported by J. S. Scott it was found that six out of seven were associated with the use of intravenous dextran as a blood substitute. It would appear that dextran either encourages the precipitation of fibrinogen as fibrin or else forms a compound with fibrinogen.

One may infer from this work that in cases of abruptio placentae early rupture of the membranes is advisable to reduce intra-uterine pressure and lessen the risk of absorption of thromboplastins. Likewise, when intra-uterine death of the foetus has occurred due to rhesus incompatibility, induction of labour should probably be carried out without delay instead of waiting for labour to commence spontaneously, as has been the practice in the past. It must be emphasized that difficulty from continued bleeding after delivery does not occur by any means in all cases of abruptio placentae, but rather in only exceptional instances. Nevertheless, it is the duty of the obstetric attendant to be alert to the possibility of hypofibrinogenaemia and to be prepared to restore the blood fibrinogen to a level at which normal clotting takes place.

The fibrinogen level in the blood of women in labour at term is said to average 0.45 grams percent. The critical level below which coagulation fails is between 0.07 and 0.1 grams percent. In practice the accurate determination of the blood

fibrinogen is unnecessary; the condition of hypofibrinogenaemia can be recognized by the "clot observation test" where a sample of freshly-drawn blood fails to clot in a test tube in the absence of an anti-coagulant.

The dose of fibrinogen recommended is from 2 to 6 grams intravenously. It has been noticed that doses theoretically inadequate may be effective in some cases, i.e. as little as 250 mg. The deficiency cannot be made good by blood transfusion alone. Dried plasma is an excellent source of fibrinogen, especially if reconstituted to double strength by adding only half the amount of water that is generally used.

References

1. Dieckmann, W. J., Amer. J. Obstet. Gynec., 50: 28, 1945.
2. Barnett, V. H., Cussen, C. A., Brit. Med. J., ii: 676, 1954.
3. Scott, J. S., Ibid, ii: 290, 1955.

A. W. A.

Antepartum Hemorrhage

Antepartum hemorrhage is defined as vaginal bleeding occurring in the last trimester of pregnancy (28th week to term). In recent years our concepts relative to the pathogenesis and management of this complication have changed substantially so that a brief review should be timely. Furthermore, the hemorrhages associated with pregnancy and labour have, in some series, become the leading cause of maternal death.

The etiology of antepartum hemorrhage is customarily divided into two major groups, placental and extraplacental.

1. Placental Source of Bleeding:

- (a) Abruptio Placenta (separation of normally implanted placenta)
- (b) Placenta Previa (low segment implantation of placenta)

To these classical types may now be added:

- (c) Marginal Sinus Rupture (common)
- (d) Circumvallate placenta (not uncommon)
- (e) Vasa Previa (rare)

2. Extra-Placental Source of Bleeding:

- (a) Labor "show" (common, mixed with mucus, scanty)
- (b) Cervix—Polyp, Erosion, Carcinoma, Varicosity—infrequent
- (c) Vagina, vulva, urethra, rectum (rare).

It is not the purpose of this review to describe in detail all the above listed causes. Briefly, lesions in group 2 seldom produce profuse bleeding and they can be detected by routine pelvic examination including inspection with a speculum. It is essential, however, to include or exclude their presence in any and every case of pregnancy bleeding, before proceeding to treat a case with radical therapy.

With regard to the placental group it has been estimated that only slightly over one half of all cases can be explained on the basis of abruptio placentae or placenta previa. Clinicians for many years have been aware of this fact, but have been

hard pressed for an explanation. By way of illustration, seven cases of antepartum bleeding seen in the Maternity Pavilion, Winnipeg General Hospital from June through August 1955 were recorded as of undiagnosed or idiopathic origin (i.e., not due to abruptio, previa, or of extra placental type).

Largely through the studies of Fish et al of Atlanta, Georgia, the concept of bleeding from the marginal sinus of the placenta has been established, and probably accounts for this hitherto unexplained group of cases. The marginal sinus is a circular venous channel surrounding the periphery of the placenta. Into it drains a large fraction of the placental lake blood on its way back to the maternal venous circulation. As it is exactly at the placental edge, the sinus derives poor support from surrounding tissue and indeed is covered in most areas by the membranes only, which pass down over it to reach and line the lower segment. As the latter develops and expands the increased tension on the membranes may thus tear through the thin-walled sinus and permit blood to escape outwards between the uterine wall and the membranes. After delivery of the secundines one finds a dark clot at the placental edge and a long, black, adherent trail of old clot reaching to the opening of the membranes.

Clinically, bleeding from a ruptured marginal sinus closely resembles that from placenta previa—it is causeless, painless, recurrent. Its tendency to recur, however, is only about half that of placenta previa. The blood flow is frequently darker, more continuous, and less profuse than that from average case of previal bleeding. On examination, either radiologically or vaginally, no evidence of placenta previa is found. According to Fish, in some cases of placenta previa, bleeding arises from a ruptured marginal sinus. Moreover, abruptio placenta is ruled out by the absence of pregnancy toxemia, pain, uterine tension and tenderness, and the findings after delivery on examining the after-birth. Also, fetal distress and death occur much less often than with abruptio placentae.

Management

All cases of frank antepartum bleeding should be transported to a hospital without pelvic examination or packing. MacFee and Johnson have shown that few women will die from the first hemorrhage if they are left undisturbed. On admission to hospital arrangements for blood transfusion must be made at once and blood secured for grouping and cross matching. General and abdominal examination only are performed to assess the physical status of fetus and mother and to detect malpresentation, disproportion, and whether labour has or has not started. Blood pressure and a hemogram should be recorded and a catheterized specimen of urine obtained for albumin estimation. Unless the clinical findings point unequivocally to the correct diagnosis, the

patient is moved gently to the x-ray room for a placentogram, which in a very large proportion of cases will determine the site of placental implantation.

If the patient is near or at term, or in early labour, she is then taken to the operating room and under a double set-up (prepared for vaginal and abdominal delivery) and with compatible blood on hand, a gentle visual examination is made to rule out cervical and other rare extraplacental lesions. In most cases a very gentle palpation of the fornices and the region of internal os is made to detect placental tissues. If the patient is a multipara, with the placenta palpable but not covering (partly or entirely) the os, and not posteriorly implanted, one may rupture the membranes artificially. Abdominal delivery is the procedure of choice in practically all other cases of placenta previa.

If the pregnancy is more than 3 weeks from term and the placentogram suggests placenta previa, then no examination per vaginam is made and the patient is kept under observation in hospital with the expectation that the bleeding will cease or remain minimal, and the fetus is thus permitted further intra-uterine development. This new expectant treatment of placenta previa aims to reduce the great fetal loss from prematurity formerly resulting from active interference in all cases of previa regardless of the stage of gestation. Such a routine carries considerable responsibility and is a cause of no little anxiety in some cases, but appears to be worth while with respect to improved fetal salvage. When the pregnancy has been carried to within a week or two of term, or if severe bleeding supervenes during the waiting period, then the case is handled as described above for the patient at term.

If abruptio placentae is diagnosed, conservative treatment appears to be the favored management at present. Associated toxemia must be treated, the blood fibrinogen level estimated, pain relieved with morphine, and simple rupture of the forewaters carried out. Labour usually progresses rapidly in such cases but it is important to be prepared for post-partum bleeding. If despite these measures bleeding increases and the fetus is still alive Caesarean section must be seriously considered. In most severe cases, the fetus succumbs early and rapid delivery per viae naturales occurs, so that abdominal intervention seldom is feasible or desirable. Hysterectomy for intractable postpartum hemorrhage in cases of abruptio placentae will rarely be required, now that we understand more clearly the condition of afibrinogenaemia, and possess a commercial preparation of fibrinogen which is very effective in its control. The use of the Spanish windlass (abdominal constricting binder) and pitocin is at present considered to be of no help and should be abandoned.

Where marginal sinus rupture can be diagnosed transfusion is given, the membranes are ruptured, and normal onset and progress of labour awaited. If profuse and uncontrollable bleeding occurs, which is rare, abdominal delivery is the preferred method of treatment.

B. D. B.

Carcinoma in Situ of the Uterine Cervix

In recent years increasing attention has been paid to the condition known variously as carcinoma in situ, intra-epithelial carcinoma, pre-invasive carcinoma or Bowen's disease of the cervix. This condition is not frank invasive carcinoma as the pathological changes are limited to the thickness of the epithelium and metastases do not occur. The available evidence does suggest, however, that in its natural life history invasive carcinoma will develop from carcinoma in situ in from 3 to 12 years though, in some cases, the untreated condition may regress.

As there are no characteristic gross appearances carcinoma in situ cannot be diagnosed without the aid of the microscope. The cervix may appear perfectly healthy or there may be varying degrees of chronic infection present. Most commonly the lesion is found in biopsy material from cervices showing chronic infection or in cervices removed during a Manchester repair or at total hysterectomy for some other condition.

A diagnosis of carcinoma in situ lays a heavy burden of responsibility on the pathologist. Varying degrees of basal cell hyperactivity may be reported erroneously as carcinoma in situ and because of this report hysterectomy may be performed; or an already invasive carcinoma may be reported as carcinoma in situ and, as a result, receive inadequate treatment.

In submitting a cervical biopsy it should be remembered that the pathologist can only give a report on the material received by him — thus material should be removed from several areas of the cervix. Most commonly a "four point" biopsy is taken, i.e. specimens are taken from areas corresponding to the four compass points.

Treatment

When a diagnosis of carcinoma in situ has been made from a biopsy specimen the possibility that some portion of the condition is already invasive must as far as possible be excluded. For this purpose a larger area of the cervix should be removed, i.e. a cone-shaped area removed by the scalpel. It must not be removed by the diathermy knife as the tissue coagulation which is produced renders the specimen valueless. If this specimen shows the presence of true invasive carcinoma then proper radiation or surgical treatment for carcinoma must be carried out. If no invasion is demonstrated treatment will depend on circumstances.

In women who are not desirous of having more children total hysterectomy with removal of a small cuff of vagina should be performed. The ovaries may be preserved if they appear healthy. In younger women or in those desiring pregnancy hysterectomy may be delayed provided the patient can be kept under observation and frequent cervical biopsies can be done. This close observation must be maintained, or even increased, during and after pregnancy, should it occur.

Where there is any doubt as to the diagnosis of carcinoma in situ definitive treatment should be postponed while the patient is kept under observation and repeated biopsies are taken. The naturally slow development of the disease makes this justifiable.

A. S. M.

Medico-Legal

The Role of a Pathologist in Medico-Legal Problems

D. W. Penner, M.D.

Pathology is the science which deals with the study of disease. It encompasses a large and varied field. It is therefore not unexpected that within it have developed various subspecialties such as Bacteriology, Hematology and Medico-Legal pathology. Actually all the basic training and skills developed by a person trained in pathology are used when faced with medico-legal problems. The emphasis, however, in many matters is somewhat different than in non-legal problems.

Last year some 288 autopsies were done in Winnipeg on the order of the Coroner's Office. The purpose of every autopsy examination is any or

all of the following:

- A. To establish the exact cause of death.
- B. To establish the nature of any injury if present.
- C. To establish evidence of pre-existing disease or to establish if life itself had at any time been present as in the case of a new born child.
- D. Identification and/or reconstruction from bodies or parts of them.
- A. It is only by establishing the exact cause of death that the possibility of an unnatural death can be ruled out. The majority of cases are straightforward. A natural cause of death is found and the case can be closed. It is, however, not widely realized that in approximately 5% of all carefully conducted and complete autopsies no cause of death is found. In these cases we are simply left with no adequate explanation for death, in the light of our present day medical knowledge.

Several years ago a 15 year old boy in the presence of his father ran to catch a street car. Just as he arrived at the street car he was seen to stumble and fall down. It was first thought that he had been hit by the street car, but this was not the case. A most exhaustive examination and study failed to show the cause of death. Quite in contrast to this was the case of the elderly man brought in from rural Manitoba. This elderly man showed numerous cuts and bruises and he was covered with blood. He was found near his wood-pile adjacent to his home where he lived alone. Several days before one of his neighbors was heard to threaten him if he did not keep his cattle fenced in. Therefore, when the deceased was found, apparently, severely beaten, it looked rather bad for the neighbour. The autopsy established that the cause of death was natural, a spontaneous brain hemorrhage. Undoubtedly during the process of dying he thrashed about his woodpile injuring himself.

B. The nature of the injuries are often of the greatest importance. The interpretation of the injuries found is not always easy, as it was in the murder case, in which a 1.5 inch smooth depressed fracture of the skull was found. This suggested that the weapon used was a ball type of mechanic's hammer, and this was subsequently proven to be the case. Many questions concerning a fracture are however much harder to answer. How much force does it take to fracture a man's bones? A man falls to the floor from his chair and fractures his skull, and yet a man during his student days walked off a scaffold with a wheelbarrow load of wet cement, fell for a distance of three stories and only got a minor fracture of his ankle. Considerable accurate scientific information is known about traumatic injuries and there is nothing inconsistent with the two examples given. In the first case the full force of the fall was directly received by the skull and a fracture resulted. In the second case the force of the fall was distributed over the whole body, because of the man landing on his feet, and the various factors entering into the type of injuries received, were: the give of the ground, the position and roll of the body, the cushioning effect of the muscles and tendons. There is also a great deal of difference between the bones of a young man and an old man. Because of the various factors which enter the eventual effectiveness of the force, it is often not possible to precisely predict or evaluate the effects of any given force.

C. Identification and reconstruction from bodies or portions of bodies: Several weeks ago a badly burned torso was submitted for identification and reconstruction. From these remains it was possible to establish that the remains were from a young male of approximately 30 years, muscular, measuring approximately 69 inches and weighing

about 155 lbs. There was no evidence of previous injury or disease. The blood group and alcohol contents of the blood and urine were also determined. Equally important, it was possible to establish that the man was living when exposed to the fire and smoke. The type of information which can be gained depends on what there is to work with. The sex can be determined by demonstrating the testicles or prostate in the male or the ovaries, vagina or uterus in the female. Sex can also be inferred by the pelvic bones and certain other bone measurements and structures. In this case the external genitals had been destroyed as were most of the pelvic bones. However, the prostate could be recognized. Only one of the long bones was intact enough for measuring but from this the height could be estimated. A number of factors went into estimating the age, in which the use of X-rays was very valuable.

D. Assessment of other disease apart from the traumatic injuries causing the death is of considerable importance in civil liabilities.

Not infrequently an infant is found in some unusual place. The baby, who was placed in a shoe box and checked with parcels in Eaton's and then not claimed, is a good example. The important questions in these cases are if the child lived or not. The chief evidence for this is the aeration of the lungs. The procedure of floating the lungs in water is of some value, but not accurate enough, and microscopic studies must be made.

There are a number of things in legal medicine which are only easily and accurately answered in detective stories. One always greatly envies the storybook pathologist who is able, by just looking at the body to establish within half a minute the time of death. This fact, although of considerable importance is often most difficult to establish accurately. The muscles of the body retain their ability to respond to stimulation for approximately half an hour after death. Beyond this time the most accurate method we have of determining the interval from death is to determine the drop of body temperature. During life, body temperature is very constant in well people. The rate of cooling of the body is fairly constant, but this rate depends upon a number of factors, many of which may not be known; as in one case in which the temperature was found to be 2 degrees higher than the normal temperature. This obviously indicated that the deceased had an elevated temperature at the time of death, but since this temperature was not known the interval could not be calculated accurately. The beginning of rigor mortis and its passing off are generally too inaccurate to be of any great help. Often of value is the examination of the contents of the stomach and intestines. Not only does this tell what was eaten, but if the time of the last meal is known, because the rate of the digestion and times of passage down the intestines is fairly

constant, certain estimations can be made.

Another interesting question often asked, but not always easy to answer is "how long would a person live with the injuries found and what if any actions could be performed in this time? Only the most severe crushing injuries produce instantaneous death. Ordinarily it might be expected that a person shot through the heart with a 38 calibre bullet would very rapidly die. Yet, in one case a man, thus shot here in Winnipeg, ran approximately one half a city block before collapsing. In yet another Winnipeg case, in which a woman died of air embolus following a criminal abortion, it was categorically stated that death would have been instantaneous. In an almost identical case the deceased, after accidentally injecting air into her uterus, performed a number of normal duties and did not die for at least 20 minutes and possibly longer.

Was an injury received before or after death? Careful studies of the injured area under the microscope can often be very valuable. The tissue response to injury is well known and follows a fairly constant time sequence pattern. After death, there is, of course, no reaction by the tissue although blood cells may show limited spread into the adjacent tissue if the vessels are disrupted. During life, it takes only a few minutes for recognizable changes to occur.

Serology:

One branch of Pathology widely used in the medico-legal field is that of the serologic identification of various substances. This is one of the most reliable, accurate and exacting of all work done in a laboratory. One of the characteristics of living mammals is that they form antibodies when they are exposed to a foreign protein, and these substances which excite antibody formation are called "antigens". These antibodies are specific and only react with the antigen which caused them. This is the basis of all serologic tests, Serum or the fluid part of blood containing antibodies will precipitate or agglutinate the antigen or substance which caused them. It is, by this method, that the various blood groups are identified. The two common ones are the ABO grouping and the Rh grouping. All people have these blood groups and these are inherited according to definite laws of genetics. Parents transmit to their children their own blood groups and the children cannot have any factor which their parents do not have, and conversely the parents must transmit to their children these factors. According to the Bernstein theory the following exists in regard to the inheritance of the four blood groups A, B, AB and O:

Chart number 1 shows the blood groups of the children which cannot arise with the various combinations of blood groups in the parents. This chart however only illustrates the inheritance of the ABO system. There are other important

PARENTS			CHILDREN		CHILDREN excluded
	Phenotypes	Genotypes	Genotypes	Phenotypes	
O and O	OO and OO	OO		O	A, B, AB
O and A	OO and AO OO and AA	AO and OO AO		A and O	B, AB
O and B	OO and BB OO and BO	BO BO and OO		B and O	A, AB
A and A	AA and AA AO and AA AO and AO	AA AA and AO AA, AO and OO		A and O	B, AB
A and B	AA and BB AO and BB AA and BO AO and BO	AB AB, BO AB, AO AB, AO, BO, OO		O, A, B, AB	none
B and B	BB and BB BO and BB BO and BO	BB BB and BO BB, BO, OO		B and O	A, AB
O and AB	OO and AB	AO and BO		A and B	O, AB
A and AB	AA and AB AO and AB	AA and AB AA, AB, BO, AO		A, B, AB	O
B and AB	BB and AB BO and AB	BB and AB BB, AO, AB, BO		A, B, AB	O
AB and AB	AB and AB	AA, AB, BB		A, B, AB	O

systems, namely the MN and Rh together with P. Lewis, Kelly, Duffy, etc. The inheritance of the MN and Rh systems have been satisfactorily worked out. This knowledge of inheritance of blood groups has been the basis for use in paternity disputes. One is repeatedly asked to help prove that a certain man is, or is not, the father of a child. Under certain circumstances, it is possible to disprove parentage, but it is never possible to prove parentage.

The chances of proving non-paternity varies with the blood group, the number of people examined, and the number of the various blood groupings done. 80% of the people belong to group O or A, in approximately equal numbers, with only 10 - 15% being B and 3 - 6% AB. If the ABO system only is used, **approximately 1 in 6** falsely accused can be excluded. If the person belongs to group A the chances of exclusion are only 1 in 13, whereas if group AB chances of exclusion rise to 2 out of 5. Using the MN system as well as ABO, approximately 1 out of each 3 falsely accused can be excluded. But even when all systems are used it is not possible to exclude all of those falsely accused.

It is extremely important to realize that parentage cannot be proven. The most that can ever be determined is that the accused man could have been the parent, but then so could any other male with the same blood group. When blood grouping is to be used to exclude paternity, it is of a little value (5%) unless at least the 3 people concerned have their blood groups determined—that is the mother, child and illegal father. Only occasionally will it be of value if the child and alleged father only are examined. Last year, such a case was seen. A married man with two children maintained that his wife's third child was not his.

He and his sister were looking after all 3 children and his wife would not consent to have her blood taken. Examination of this man and the 3 children was very interesting. He was a group **AB**. The oldest two children were group A and group B respectively. The disputed third child was a group O. Since the father has to transmit either an A or B factor to all of his offspring, the third child could not have been his. This evidence was successfully used at a subsequent divorce proceeding.

Not all courts recognize this type of evidence. It was of some interest that in the Charlie Chaplin paternity trial in California some years ago, Chaplin could not have been the father, as accused, if the blood groups, as reported in the newspaper, were correct. The California courts did not, however, recognize this evidence and found him guilty.

Serologic tests are also of value in certain cases pertaining to the Fish and Game Act, as well as certain public health matters. It is possible to positively identify deer and horse meat even after the meat is ground up.

Examination of Stains:

Examination of stains, usually on clothing are frequently used in legal cases. The two commonest stains encountered are from blood and seminal fluid. Blood stains are usually easy to identify as being blood, and even the smallest amounts can usually be identified as being human in origin. If the stain is very fresh, it can be directly examined under the microscope and identified as blood. Human blood can also be differentiated from birds, fish and reptilian blood. These last three have nucleated red blood cells.

The chemical test for blood merely identifies it as blood and not as human blood. The Benzidene test as well as a number of other chemical tests are available. The spectroscope can also be used to identify blood. Only very small amounts are needed to do these determinations.

Identification as to human or various animal types is a serologic procedure. These tests usually are not designed to identify the material as human blood, but only as human protein. The test must be carefully performed and well controlled but is not a particularly complicated one. Only very small amounts of material are necessary.

Serologic Grouping of Blood Stains:

It is often of considerable value to know the blood group of a stain, which has been identified as being human. It may be impossible to do any grouping on a stain, or all known blood groups might be determined. It depends on the amount of material present and its age, as well as what has happened to the stain. Small amounts which are old or have been subjected to soap, antiseptic or other chemicals may be valueless for grouping purposes.

Examination of a Stain for Seminal Fluid:

In a rape case two types of medical examination are common:

a. To examine the vagina for evidence of injury and the presence of spermatozoa. These sperms may remain motile for 30 - 60 minutes and may be found present in the vagina from several hours to several days. The duration of survival of sperms becomes of considerable importance since the person attacked may have had intercourse some hours or days before the alleged attack.

b. Stains are usually from the clothing of the female, but occasionally from the male. Seminal stains present certain features which help to localize or suggest their origin. They fluoresce under an ultra-violet light and they impart a certain stiffness to the cloth. These stains turn a violet color in the presence of a 0.01% solution of alizarin sodium sulphate. These stains have a high acid phosphatase content and determination of this by chemical means can be used for identification.

It is also possible to identify sperm by the use of an antiserum. Sperm have group specific substance (the same groups as blood). Occasionally it may be of value to group the sperm. The usual method of identification of seminal fluid is to identify the presence of sperms by fluid extraction and identification under the microscope. The time of survival of spermatozoa in different material varies. If the material is dried and handled the sperm tends to disintegrate faster. Also, any use of soap or antiseptics tends to destroy the spermatozoa.

Chemical Analysis of Body Tissues and Fluids:

Generally speaking, there are insufficient toxicologic examinations done in most medicolegal setups. It has already been stated that under ideal conditions with complete facilities available, we are unable to state the cause of death in at least 5% of cases. If no toxicologic examinations are done, the incidence of undiagnosed cases increases significantly. The type of case in which the real problem arises is that in which a body is found and there are no witnesses concerning the time or mode of death. The problem can best be illustrated by describing a few cases:

a. A few years ago the body of a young man was found in one of our suburban parks. There were no obvious marks of external injury. All the usual identification marks were missing including labels on clothing. Complete autopsy examination showed no marks of injury nor was there an anatomical cause of death found. However, examination of the stomach suggested cyanide poisoning (by the characteristic color) and this was confirmed by chemical analysis.

b. A young well known girl died in her own home following a short gastro-intestinal upset. Autopsy examination showed no cause of death. The short illness prior to death could have been

due to poison. When this was suggested to the Coroner a chemical analysis was ordered and a large quantity of strychnine was found. The question of suicide versus homicide in such a case is often not easy, and not infrequently no definite final conclusion can be reached.

c. An elderly female was found dead in her room. There was a deep cut over her forehead and considerable blood about the room. Examination at autopsy failed to show a cause of death. The injury on the forehead was only a scalp wound and could not have caused death. Examination of blood and urine showed large quantities of sugar and ketone bodies present. The patient was therefore a diabetic and had died in diabetic coma. Injuries were undoubtedly accidentally self-inflicted.

d. A male was found dead in one of the parks. Nearby was a vial of insulin and a syringe with needle. A recent needle puncture wound was found over one of the veins of the arm. No anatomical cause of death was found. Examination of the blood showed a low blood sugar. Urine examination was negative. Autopsy was not performed until some 8 hours after the presumed time of death. Here arose the problem: insulin lowers the blood sugar but the blood sugar normally disappears rapidly from the blood after death. There are no chemical means of detecting abnormal quantities of insulin in the body. The patient was not a diabetic. Here no definite conclusion could be reached. With the low blood sugar and the needle puncture and the vial of insulin close by, it was presumed that insulin was self-administered for suicidal reasons. The injection of biological materials which are normal to the body, such as insulin or adrenalin, come close to being the perfect undetectable method for producing death. This becomes increasingly true if the interval from death to autopsy is delayed for a number of hours.

e. A young, partially decomposed female was found dead. She was considered to be healthy prior to her death. Autopsy examination failed

to show any cause of death. No evidence of injury was found but examination was difficult and inconclusive due to the decomposition. Chemical analysis failed to show any poison. Police investigation brought forth no reason for homicide or suicide. In a case such as this many theories could be postulated as to the cause of death, but that is as far as one could go at the present state of our knowledge. The above cases, however, illustrate how chemical analysis is often of considerable value when the complete autopsy examination fails to demonstrate the cause of death.

One last example of the service or help that a medical pathologist can contribute is in the legal field. A man was being charged under the Fish and Game Act for illegally catching fish prior to the opening of the season. The fish which were seized as an exhibit, were actually picked up at this northern fishing camp on the morning that the fishing season opened, and the defendant claimed that the fish had in fact been caught that morning. The question asked of the pathologist was: "Could the age of these fish be established?" In order to answer this question an experiment was set up to cover a wide range of times and temperatures. Similar fish in which the exact time of catching was known were supplied. These were then subjected to various temperatures for varying periods of time to simulate the exact condition under which the fish in question had been subjected. Then, by comparing the gross and microscopic changes with the fish seized, it could be established that the fish were a number of days old and could not have been caught on the morning of the opening of the season. When the lawyer for the accused was faced with the results of this experiment he advised his client to plead guilty.

A brief discussion of the role of a medical pathologist in legal problems has been presented. No mention has been made of alcohol in legal matters since this was dealt with in a previous publication (*The Canada Medical Association Journal* 70, 18-22, 1954).

Easy to take—Easy to give

infantol
The multi-vitamin for children

FRANK W. HORNER LIMITED



Editorial

S. Vaisrub, M.D., M.R.C.P. (Lond.), F.R.C.P. (C.), F.A.C.P., Editor

Exit 1955

December is a month of stock taking, a month of the backward glance and the parting nod, a month of retrospection. Furtively and hesitantly we jot down the year's highlights without being quite sure of their ultimate value. The past is too recent.

For a proper evaluation of recent developments in Medicine, as in other fields of human endeavour, we need perspective. It took many centuries to discredit bleeding, purging and cupping. How, then, can we pass judgment on events so near to us, that they seem to be more a part of the present than of the past? Can we be sure, for instance, that Salk vaccine, which seems to overshadow all other recent advances in medicine, may not prove in the light of history to be less significant than some bit of fundamental research presently conducted by an obscure biochemist, whose name and work have hardly attracted attention? Let us, then, disclaim all responsibility for assessment and desire for evaluation and content ourselves with a few random observations on some medical highlights, trends, and fashions of the departing year.

Trends and fashions in Medicine are reflected in the periodical medical literature. The latter mirrors faithfully the changing interest and shifting emphasis. Erstwhile popular topics, belaboured to the point of exhaustion, fade into the background, while others, previously neglected come to the fore. Thus, the past few years saw the rise and decline of such favorites as virus hepatitis, acute anuria, electrolyte imbalance, cortisone and acth. Even Potassium, the darling of both the physician and surgeon, so fashionable but a year or two ago, is now relegated to relative obscurity.

What, then were the favorites of 1955? They were, indeed, too numerous even for brief mention, for the year was an unusually well balanced one, with a well balanced literary fare. A few memorables picked out of the hat are—the Salk vaccine, respiratory physiology and its applications to pulmonary disease, new steroids, chlorpromazine, abnormal hemoglobins, hypotensive drugs, myocardial metabolism, diet and atherosclerosis, bacterial resistance . . . It is easy to see that the hat belongs to an internist. The reader, interested in all branches of Medicine will be happy to find a less biased selection in the excellent reviews of the year's highlights published in this issue. He

will also anticipate with eagerness some other reviews about to appear in the next one.

1955 has also witnessed an increasing interest in subjects not strictly scientific—medical economics, health insurance, medical education, public relations, rehabilitation, patient - doctor relationship, medical morality. (The first International Congress on Medical Morality was held in Paris in October 1955. Sample topics—human experimentation, the independence of the physician, moral consideration in the clinical study of new drugs, personal rights of the sick.) There was hardly a medical publication, which did not carry numerous articles and editorials on these tremendously important subjects. Indeed, 1955 was a year of intensive soul-searching and introspection.

Leaving the field of medical literature, and passing on to medical events, we note with pride and satisfaction the success of the Joint Annual Meeting of the British Medical Association, Canadian Medical Association and Ontario Medical Association in Toronto—the outstanding medical event in Canada this year. On the local scene the year saw an overall intensification of post-graduate education, sponsored by the General Practitioners Association, the University, and small study groups. Physical facilities for improving undergraduate and post-graduate education, will be augmented with the completion of the extension of the medical college, now under construction. The opening of the new wing of the St. Boniface Hospital, the construction of the new Children's Hospital, and the additions to the Deer Lodge and Misericordia Hospitals will, undoubtedly, also contribute greatly to this end. Indeed, if the quest for knowledge keeps pace with the current "edifice complex", Winnipeg will become an important centre of undergraduate and post-graduate study.

The microcosm of the Manitoba Medical Review saw no drastic changes in 1955. Contributions were neither scarce nor superabundant. Their quality is difficult to evaluate, for the editor receives no fan mail. Nor has the commendable habit of "writing to the Times" taken hold on this continent. This, indeed, is a pity, for constructive criticism is the best safeguard against complacency. Let us, then, resolve . . .

Too early for vigorous resolutions . . .

Almost time, however, for the greetings of the season. Best wishes!

Ed.

Questions and Answers

Diagnostic and therapeutic puzzlers facing the physician in his daily practice do not always lend themselves to prompt and easy solution. An appeal to memory or a frantic search through the pages of a handy text may on occasions bring a desired answer to a troublesome question, but as often as not they fail to do so. Moreover, lack of references, and of the time required for their perusal tend to leave many perplexities in a state of unhappy unresolution.

In order to provide an additional source of readily accessible information and advice, where they may be needed, the Manitoba Medical Review will establish a department of "Questions and Answers". Readers are invited to avail themselves of the opportunity to air their problems, as well as share them with other readers. Even though the answers may at times fall below the standard set by the Oracle of Delphi, they will be sure to reflect the honest and considered opinion of this journal's "brain trust".

Questions should be addressed to the Medical Quiz Box, Manitoba Medical Review, 604 Medical Arts Building, Winnipeg.

Ed.

Manitoba's Medical Men

XXII. Hospital Case Records

The following extracts are from a letter received by the executive of the Manitoba Medical Association, concerning the release of hospital case records:

"Several differences of opinion have come to the fore recently, mainly concerning the fact that the lay Administrator, or his staff, have been

giving out information from the records without consulting the doctor in charge of the case. Particularly this has been done when the patient has insurance coverage and the Insurance Company writes the hospital for information and encloses a cheque for secretarial fees.

"We would like a legal opinion from the Solicitor for the M.M.A. concerning the Medical Records of hospitals here in Manitoba. Who do the records belong to? Can a representative of an Insurance Company study the records of a patient they have insured? 'Just suppose that Mr. X took out insurance for self and family. During Mr. X's absence from town his wife is admitted to hospital — say for incomplete abortion. Can the hospital send his information to the Insurance Company because they send a photostatic copy of Mr. X's signature giving permission to divulge this information?"

The discussion on this subject by the members of the executive was chiefly in regard to the position of the attending physician in this matter. If the patient wants to get insurance, he or she has to sign a paper for the release of the information. It is common practice for the hospital to release this information when the physician is still in practice, and when hospital records are released both the hospital authorities and the physician might be placed in an embarrassing position.

The consensus of opinion seemed to be that the hospitals have a right to release records of patients so long as the attending physician is not involved, because it was considered that this was a matter between the hospital, the patient and the insurance company.

This problem is being studied by the association's solicitor.

L. A. Sigurdson, M.D.

Obituary

Dr. Henry Funk

Dr. Henry Funk, head of the department of orthopedic surgery at St. Boniface Hospital, died on October 19, aged 50. Born in Altona, Manitoba, he attended Wesley College (B.A.) and University of Manitoba (M.D., M.S.). Later he became a member of the Canadian Orthopedic Association and a Fellow of the Royal College of Physicians and Surgeons of Canada, a member of the teaching staff of medical faculty of Manitoba University and of the attending staff of St. Boniface Hospital. He was consultant in orthopedics to the Manitoba Sanatorium Board. He is survived by his wife and three daughters.

Dr. John Richard Thomson

Dr. John Richard Thomson, 82, died on October 31 in Victoria Hospital, Winnipeg, the hospital which he administered for 33 years. Born at Scarborough, Ontario, he received his early education there. After teaching school, homesteading and spending two years in a business administration course in Toronto, he graduated from Manitoba Medical College in 1901. He carried on general practice and was chairman of the Board of Trustees of Victoria Hospital from 1920 to 1953, when he retired because of ill health.

He is survived by his daughter, Dr. Helen Clanfer.

Association Page

Reported by M. T. Macfarland, M.D.

Northern District Medical Society

The semi-annual meeting of the Northern District Medical Society was held at the General Hospital, Dauphin, on Thursday, November 17th, 1955.

Present were: Dr. M. Tanasichuk, President; M. Potoski, Secretary-Treasurer; J. N. Briggs, Winnipeg; H. F. Cameron, Winnipeg; D. L. Kippen, Winnipeg; Ruvin Lyons, Winnipeg; M. T. Macfarland, Winnipeg; J. McKenty, Winnipeg; W. Forster, Brandon; D. M. Cameron, Swan River; M. Kozakiewicz, Swan River; T. F. Malcolm, Swan River; C. N. R. Warner, Swan River; Mrs. C. N. R. Warner, Swan River; Dr. T. Kinash, Gilbert Plains; R. Buczok, McCreary; C. R. Green, Ethelbert; M. K. Brandt, Dauphin; R. E. Dicks, Dauphin; H. Little, Dauphin; B. E. Symchych, Dauphin; C. G. Wright, Dauphin.

The Clinical session included the presentation of cases of Infectious Hepatitis, Sub acute nephritis, Rheumatoid Arthritis with Gastric ulcer, Patent Ductus Arteriosus, Pyloric Obstruction, operative, in an infant, and Secondary Neoplasm in the Brain. The visiting clinicians participated in the discussion which was very much worthwhile.

Dinner was served under the auspices of the Administrator, Mr. A. J. Schmiedl, and the matron, Mrs. James Paul, following which the afternoon session was held in the lecture room of the Health Unit.

Dr. H. F. Cameron spoke on "Head Injuries" and showed slides on "Subdural Haematoma"; Dr. D. L. Kippen spoke on "Infectious Hepatitis"; and Dr. J. N. Briggs spoke on "Some Problems of the Newborn Infant". Dr. Jack McKenty spoke concerning the organization of the College of General Practice. Dr. Ruvin Lyons, President, and Dr. M. T. Macfarland, Executive Secretary, extended greetings of the Manitoba Medical Association and discussed some of the problems facing the profession at this time.

At the Business Session, the following officers were elected: President: Dr. H. Little, Dauphin; Vice - President: Dr. C. R. Green, Ethelbert; Secretary-Treasurer: Dr. M. Potoski, Dauphin; Representative to M.M.A. Executive: Dr. M. Potoski, Dauphin; Representative to G.P.A.M.: Dr. B. E. Symchych, Dauphin.

At the conclusion of the meeting, the members were entertained to a buffet luncheon at the home of Dr. M. Potoski.

M. T. Macfarland.

College of Physicians and Surgeons of Manitoba

Letter to the Registrar

Dear Dr. Macfarland:

In September, 1955, the Joint Commission on Accreditation of Hospitals carried out an evaluation survey of the following institutions:

Manitoba Sanatorium, Ninette, Man.

St. Boniface Sanatorium, St. Vital, Man.

Clearwater Lake Sanatorium, The Pas, Man.

The Board of Commissioners has recently advised that all the above institutions have been approved for full accreditation.

Brandon Sanatorium, Brandon, also is fully approved.

. . . we would be pleased to have this drawn to the attention of the medical profession as a news item in the Manitoba Medical Review. The inspection is very thorough and demanding and it is with satisfaction that these institutions for the care and treatment of tuberculosis are rated highly and given full approval.

Yours sincerely,

E. L. Ross,
Medical Director.



today...

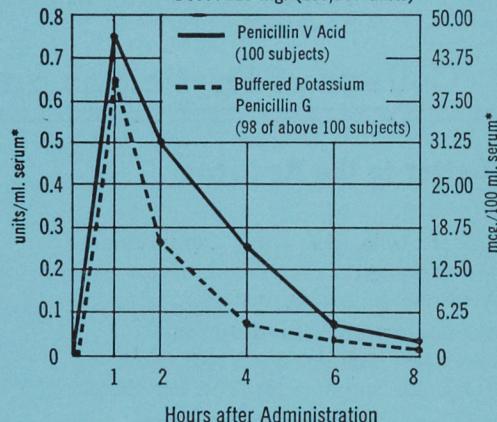


TOMORROW'S ANTIBIOTIC PENICILLIN V *a new penicillin*

- With high resistance to degradation in acid media, complete solubility in alkaline
- With minimal destruction in the stomach, maximal absorption in the duodenum
- With greater activity than potassium penicillin G against certain micro-organisms
- That produces assured and higher blood levels than any other oral penicillin (urinary excretion is twice that of penicillin G)
- That is well tolerated and virtually nontoxic
- That needs no bulky dose-limiting buffer
- Supplied in Tablets, 125 mg. (200,000 units) each, bottles of 12 and 100. Also available: BICILLIN • VEE Tablets, 100 mg. (100,000 units) benzathine penicillin G and 62.5 mg. (100,000 units) penicillin V; bottles of 12 and 100.

These are the blood levels . . .

Dose: 125 mg. (200,000 units)



*1 mcg. penicillin V = 1.695 penicillin V units

1 mcg. penicillin G = 1.667 penicillin G units

PEN • VEE • Oral

Penicillin V, Wyeth
Phenoxymethyl Penicillin



Wyeth
Registered Trade Mark
WALKERVILLE, ONTARIO
WINNIPEG - MONTREAL



Social News

Reported by K. Borthwick-Leslie, M.D.



Christmas Greetings to All, and of course Happy New Year's Holiday starting 1956 with a Bang. November — no gossip.

Juicy convention items were too late for Gordon and Co. so out with stale news.

Speaking of the convention, Mrs. Cam McIntyre called from Selkirk asking my help.

In October, while enjoying the Medical Wives' tea at the P & B Club, she lost one seal combination cape and "bum freezer" jacket, obviously taken in error. Mrs. McIntyre has the jacket left on the rack, but would certainly be happy to replace it with her own. The Parker pen in pocket is also important, for sentimental reasons.

Dr. Cam McIntyre, you know, is on the staff at Selkirk Mental Hospital. Thank you.

Congratulations to our doctors who were inducted as Fellows of the American College of Surgeons in Chicago.

Drs. Ruvin Lyons, Raymond D'Agincourt, N. P. Merkeley, with Drs. Harvey M. Nichol and Percival Johnson of Flin Flon.

Also Dr. Fischel Coodin has been elected to the American Academy of Pediatrics.

Dr. P. H. T. Thorlakson, M.D., '19 named Honorary President of the U. of M. Alumni Association and also to Dr. Alan Klass who was elected chairman of the executive committee of the local branch of Canadian Institute of International Affairs.

♦

Dr. and Mrs. Charles Walton are, via Barbados, attending the International Congress of Allergists. Dr. Walton, as a delegate of the Canadian Academy of Allergists will be a guest speaker.

♦

Dr. John O'Keefe, formerly Director of the Public Health Unit, Flin Flon is now doing post-graduate study at the Manitoba Medical College and General Hospital in his field of Public Health. The best of success to you, John.

♦

His worship Mayor Stuart Schultz with 14 years experience as Alderman in Brandon and many more years as Superintendent of the Brandon Hospital of Mental Diseases, assumes his new duties well equipped to face problems of any type. Congratulations Dr. Schultz.

♦

Up pops Dr. Ellen Taylor in a new role . . . Inventor yet . . . Mighty smart and efficient does her idea of skeletal exercises for Polio patients confined to a respirator. With cooperation from Dr. Morley Elliott and Prof. Hovey, the unique and complicated machine is now on trial.

♦

Sunday, Oct. 16th, in the Rosh Pina Synagogue, Dawn O'Brien became the bride of our good friend Dr. David Swartz. Reception following at Synagogue. Motor trip to Ozark Mountains. Have now returned to Winnipeg, residing at 37 Balmoral Place.

So I boobed, I fumbled, I dropped the ball . . . And did I hear about it from the crew in Morden. Apparently Dr. and Mrs. E. Clark, congratulated on the birth of a son, in the last issue, are an error on my part. Dr. Clark is a Veterinary Surgeon, not one of our ordinary Surgeons. He is also to be congratulated on the excellent job he did in protecting the virginity of the latest members of my family in Morden — two kittens.

♦

Dr. J. B. Ritchie, B.A. '10, M.D. '16, now of Regina, Sask., received the honorary degree of Law at a special convocation held in Saskatchewan in connection with the opening of the new university hospital.

♦

Dr. Christopher H. Moore, M.D. '41 received the degree of Master of Science in Ophthalmology from the University of Minnesota, July 19, 1955.

♦

Dr. Allan M. Davidson, '46, Major R.C.A.M.C., formerly of Whitehorse Military Hospital is now at Toronto East General and Orthopaedic Hospital, Toronto.

♦

Dr. and Mrs. Samuel Bellan remind me to announce the arrival of their second son, Jerry, July 7, 1955. Sorry Sam, guess I missed that one while on "literary holidays".

♦

Dr. and Mrs. Fletcher D. Baragar, announce the birth of Fletcher David, Oct. 5, 1955, in Winnipeg.

♦

Dr. and Mrs. J. H. Crust, Oakenwald Ave., are happy to report the arrival of Lillian Ruth, Sept. 5th, sister for Carole, Ethel Gail and Louis Jonathon. Oh . . . that Fort Garry; healthy environment.

♦

Dr. and Mrs. Noel Book, Cupar, Sask, announce the birth of William Jeffrey, Oct. 19, 1955, in Winnipeg. A brother for Brian.

♦

Dr. and Mrs. George Haywood, Ingersoll St., happily announce a brother for Sue, Sept. 21, 1955.

♦

Dr. and Mrs. E. Otke, Roblin, Man., also announce the birth of Edward Neil, Sept. 28, 1955, in Winnipeg.

♦

Dr. and Mrs. Rod M. Chadwick are happy to welcome Peter Allan, Sept. 27, 1955, in Red Deer, Alta. Hello, Rod.

LEUKORRHEA

VAGINAL INFECTIONS



OVOQUINOL

(VAGINAL CONES)



THREE FORMULAS

OVOQUINOL-PLAIN

Diiodohydroxyquinoline U.S.P.	75 mg.
Sodium Propionate	500 mg.
Sulfadiazine U.S.P.	390 mg.
Phenoxyethanol B.P.C.	0.04 cc.
Destrose and Lactose	q.s.

OVOQUINOL-OESTRO

Same formula as OVOQUINOL-PLAIN plus 0.01 mg. Ethinyl-oestradiol B.P. per cone.

OVOQUINOL-JUNIOR

Tiny-shaped, one-third the strength of OVOQUINOL-PLAIN plus Ethinyl-oestradiol, 0.0033 mg.

DOSAGE

One or two cones per day preferably at bed-time or as prescribed by the physician.

SUPPLIED in bottles of 12

NADEAU LABORATORY LTD.

Montreal

Canada

Social News (Continued)

Dr. and Mrs. John Maclean are pleased to announce the birth of a son, Oct. 24th, in Winnipeg.

Dr. and Mrs. Steven Sabara announce the arrival of Iris Johanna, Oct. 23rd, in Winnipeg.

Dr. and Mrs. Duncan Govan welcome Jennifer May, Oct. 20, 1955, in Regina, Sask.

Dr. and Mrs. A. Ferre announce the birth of their daughter, Sept. 17, 1955.

Dr. and Mrs. H. C. Hutchison are very happy to announce the arrival of a son, October 24, 1955.

I understand it was with difficulty that Hutch regained enough strength to get back to work, and pack around those cigars.

Dr. and Mrs. Harold Blondal, a son, John August, on Sept. 21, 1955. A beautiful August Blondal.

Dr. and Mrs. S. Berger are happy to report the birth of Samuel Mark, Oct. 27, 1955.

Dr. and Mrs. Jack McKenty announce the arrival of Marianne, November 12, 1955.

Dr. Saul S. Berger announces the removal of his offices to 901 Boyd Bldg. Dermatology only.

David H. Stein, M.D., F.R.C.P. announces his association with the Mall Medical Group, in the practice of Internal Medicine and Cardiology

Quentin D. Jacks, M.D., (Man. '40) having completed a fellowship in Otorhinolaryngology at the Mayo Clinic, is now located in Vancouver, Suite 505, 736 Granville St.

Drs. Wm. Boyd, Donald J. Hastings and K. V. Borthwick-Leslie are in the throes of occupying their new suite of offices at 132 Medical Arts. "The Coral Corridor". Next door neighbors are Drs. A. G. Dandinault and John Stolar. Honestly, those "red lights" are the Fire Exit signs only.

Dr. Samuel Boyd is also very happy in his new location, 211 Medical Arts. More new office moves next month.

November 19th — St. John's United Church was the scene of the marriage of Dr. Bernadine Roe to John Hunter Restall.

On their return from a motor trip in the U.S.A. Mr. and Mrs. Restall will reside in Winnipeg.

The New Medical Library

The library floor in the new building of Manitoba University Medical School is a librarian's dream. It has ample light, a ventilating system and sound proofing. The general reading room is large and airy; there is a special room for doctors in which smoking is allowed; three small rooms for those undertaking a particular or extended piece of research and a room for rare and valuable books.

The present library possesses a considerable number of such books and atlases, thanks largely to the good offices of Dr. Bruce Chown and the generosity of the New York Academy of Medicine and other donors, but this number can be augmented through further gifts. Those possessing medical works which come within the category of the rare and historical are urged to donate or loan them to the library where they will be carefully preserved and properly displayed. Other gifts such as cash or cheques will be thankfully received and gratefully applied by the library committee.

Our medical library is a work room not only for undergraduates but also for all students of medicine and its applied branches. It should rank as equal in value to the other laboratories of a hospital in giving aid and direction to those who are charged with the care of the sick and preserving the health of the people.

Victorian Order of Nurses

The nurses have had a busy summer and autumn . . . unusually busy. They have had a record number of calls for their service, and of course all calls have been answered. The busy summer did not create a problem because there was no staff shortage. The Victorian Order Board has improved transportation facilities by adding a car to the fleet. There are now eight cars in use daily; public transportation is used by some of the nurses, and when necessary U-drive cars are hired (the cost of the latter being quite moderate).

There are 18 registered nurses on the staff and each makes an average of 8 visits daily, carrying out the family physician's instructions during each visit.

Anyone in the Greater Winnipeg area may use Victorian Order Service. The cost of a visit is \$2.00 and many patients can and do pay this fee. However, the fee may be adjusted if indicated and free care is given when necessary, such adjustments being made by the nurse when she visits the home.

For visiting nursing service to your patients call the Victorian Order of Nurses, 92-8529.

Children's Hospital — Winnipeg

Clinical Conferences will be held on the 1st, 2nd and 3rd Tuesdays from 12 p.m. to 1 p.m.

*Laying aside our glasses
in appreciation*



To Wish You and Yours
A Merry Christmas and
a Happy New Year . . .

Jack Mallon



FOR
"MANY
HAPPY
RETURNS
OF
THE
DAY"

GERIPLEX®

KAPSEALS® GERIATRIC VITAMIN-MINERAL COMBINATION

The future is more likely to have "happy returns" for your middle-aged and older patients who avoid nutritional deficiencies.

Prophylactic use of GERIPLEX simplifies correction of dietary inadequacies that eventually lead to debility and to tissue damage. One Kapsel per day supplies mineral nutrients, eight important vitamins, and the starch-digestant Taka-Diastase®...all in ample amounts to supplement the average diet.

During febrile illness, during preoperative, postoperative and convalescent periods, and at other times when nutritional requirements are elevated, increased dosage of GERIPLEX will help maintain optimal vitamin-mineral intake.

GERIPLEX Kapsels are supplied in bottles of 100 and 500.



Parke, Davis & Company, Ltd.

TORONTO, ONTARIO

1955

COMMITTEE REPORTS

Manitoba Medical Association
(Canadian Medical Association, Manitoba Division)*To the Members of the Manitoba Medical Association:***1.**

On the occasion of the 48th Annual Meeting, the Association is privileged to welcome guests, members and homecoming members of the 1930 graduating class in medicine. It is a matter of regret that commitments with the World Health Organization in Geneva and the British Medical Association Council in London prevent our illustrious and multi-honoured Canadian Medical Association President, Dr. T. C. Routley, from attending this meeting. Dr. A. D. Kelly, genial secretary, will attend and speak at a noonday luncheon and other speakers of the C.M.A. team will be Doctors J. C. Beck, Montreal, and E. H. Botterell, Toronto. Brig. J. N. B. Crawford, Ottawa, and Dr. Maxwell Wintrobe, Utah, require little introduction to a Manitoba audience, and Doctors D. W. Hastings, Minneapolis, and J. T. Priestley, Rochester, will find a warm welcome. Dr. Hugh Saunderson, President, University of Manitoba, will also be a luncheon speaker.

The 1956 Annual Meeting will be held at the Royal Alexandra Hotel during the week of October 15th.

2.

During the year 1954-55 the Executive Committee has met on ten occasions with an average attendance of eighteen members and four invited guests. With the exception of one dinner meeting held at the Fort Garry Hotel to honour the newly appointed Minister of Health and Public Welfare, Hon. R. W. Bend, all sessions were held in the Board Room of the Manitoba Medical Service on Osborne Street. The courtesy of the Board of Trustees in making this accommodation available is gratefully acknowledged.

3.

Removal to another province shortly after his installation and subsequent resignation of the President, posed a constitutional problem for the Executive Committee which was finally resolved when the First Vice-President became Acting President. The Committee on Constitution and By-laws will present amendments to clarify future situations, also to include the Executive Secretary as one of the signing officers.

4.

During the year arrangements were completed for the payment, on a quarterly basis, of travel expenses for members from outside Greater Winnipeg who attend meetings of the Executive Committee. The Treasurer was also authorized to pay the cost of luncheon or dinner meetings called to transact Association business.

Authority was also given to purchase a new die, properly worded, from which the medal awarded annually to the medical student achieving the highest marks in the first four years of the course is made.

5.**Canadian Medical Association**

Toronto, in June, was host to the Fourth Commonwealth Medical Conference, and the conjoint Annual Meeting of the British (123rd), Canadian (88th) and Ontario (75th) Medical Associations and a colourful conclave it was.

General Council, C.M.A., was held on June 17th and 18th and the Manitoba Division was represented by Doctors A. R. Birt, W. K. Hames (Kenton), R. Lyons, M. T. Macfarland, J. McKenty, G. T. MacNeill (Carberry), R. W. Richardson, F. H. Smith, W. F. Tisdale, Drs. C. W. Burns, C.M.A. Past President and C. H. A. Walton, representative, Canadian Association of Allergists, also occupied Council seats.

6.

Although a detailed report of the deliberations of General Council, the C.M.A. parliament, are contained in the September first issue of the Canadian Medical Association Journal, the

unique occasion merits further mention.

Social events for Council were a reception by Lady Eaton at King, Ontario, and a Civic Reception and Musicale in the Concert Hall, Royal York Hotel. Religious services were held on Sunday afternoon. Monday evening was marked by the presentation of the Toronto banner to B.M.A., by the installation of Dr. T. C. Routley as President of the British Medical Association, succeeding Sir John Mcnee, and at the Annual General Meeting on Wednesday, June 22nd, the chain of office, indicative of the C.M.A. presidency, was passed from Dr. G. F. Strong to Dr. T. C. Routley, Senior Membership was conferred in absentia on provincial nominees including Dr. F. T. Cadham.

Tuesday evening the Ontario Medical Association dinner was followed by a square dance, and the Annual Dinner of the British Medical Association on Thursday evening was a highlight. Dr. S. S. B. Gilder was appointed Editor of the Canadian Medical Association Journal on the retirement of Dr. H. E. MacDermot whose many years of service were recognized by a suitable presentation. Mr. L. W. Holmes was appointed Assistant Secretary and will devote his time to Public Relations in which capacity he will be available to the Divisions for consultation.

Features of the C.M.A. Annual Meeting were approval of statements on policies and health insurance, rehabilitation and standards for hospital interneship.

7.**Advisory Commission Under the Health Services Act**

Doctors D. L. Scott, W. F. Tisdale and C. W. Wiebe represent the Association, and Dr. Scott was reappointed for a further three-year term ending 1957. He was chairman of a committee to recommend adjustments in conditions of service and salary under the municipal physicians contract.

8.**Cancer Relief and Research Institute**

The three representatives constitute the Cancer Committee. Dr. E. F. E. Black accepted appointment for one year replacing Dr. C. H. A. Walton, who retained board membership as a statutory representative of the College of Physicians and Surgeons of Manitoba. Dr. R. O. Burrell remained a member for two years and Dr. P. H. T. Thorlakson was invited to accept a three-year appointment. Interesting developments have taken place, and will be reported by the Committee. Executive approval was given to the establishment of an Isotope Laboratory by the Institute.

9.**Civil Defence**

While the initial planning of the Metropolitan Board envisaged a local problem the Winnipeg Medical Society maintained an alert planning committee. When the emphasis changed and total evacuation was visualized it was agreed that planning should be on a provincial basis. Fortunately Drs. J. T. MacDougall, Chairman, J. L. Downey and A. R. Tanner were persuaded to continue as the Committee, and arrangements were made through the Deputy Minister of Health and Provincial Co-ordinator to have Colonel C. G. Wood prepare a master medical plan.

10.**District Medical Society**

Clinical days arranged by the Education Committee have been held with considerable success during the year and will continue, if possible on regular schedule, in the ensuing year. Funds are available through the Departments of Paediatrics and Psychiatry, of the University of Manitoba for the provision of speakers, and a grant for 1955-56 from the Canadian Medical Association will supplement funds available on a regular basis from the College of Physicians and Surgeons.

11.

Manitoba Medical Review

At the request of the Executive Committee, Dr. S. S. Peikoff acted as Interim Editor until the appointment of Doctor Samuel Vaisrub as Editor for the period of one year from January 1st, 1955. An enthusiastic editorial board was appointed, representative of several scientific departmental interests and two meetings have been held. A new copyright was secured and an increased grant for illustrations was authorized to assist the Editor and Business Manager, Mr. J. G. Whitley, in the continued production of a first rate provincial medical periodical. The Editor attended the Medical Journalist Conference at Toronto in June.

12.

Eye Bank

A communication from the Eye, Ear, Nose and Throat section was referred to the Canadian Medical Protective Association, later the Manitoba Medical Association solicitor who suggested a study looking towards legislative action. A further request may come from the section.

13.

Legislation

A watching brief was maintained by the Executive Secretary during the session of the provincial legislature and bills which might have implications for the profession were followed in the house and committee sittings. Amendments to dental and pharmacist bills, to the Health Services and Municipal Acts to permit Municipalities to contract with Manitoba Medical Service or Manitoba Hospital Service Association, and enactment of Disabled Persons legislation to provide pensions for totally disabled persons were the main items. A report concerning mandatory inquests in cases of death resulting from electro-shock therapy engaged the attention of the Legislative Committee and will be reported upon.

14.

Manitoba Hospital Service Association

Advisory Committees were again named in Winnipeg to advise on procedures and borderline claims, and a new committee was agreed upon by the Brandon and District Medical Association. Information cards were circulated to the profession by M.H.S.A. In accordance with the revised Act of Incorporation M.M.A. was requested to name one representative to the Board of Trustees for a term of three years, and the Executive Secretary was requested to act. When the other two appointees of the Winnipeg Medical Society retire replacements will be nominated by M.M.A.

15.

Manitoba Medical Service

Once a Committee of this Association, the corporation now comprises a Board of Trustees to which two-thirds of members are nominated by M.M.A. Policy and fee matters are still referred to M.M.A. for opinion. A special committee was constituted to discuss membership, procedures, and trends and to recommend methods for improvement of this prepaid medical care plan. Decisions were taken during the year against enrolling medical members as a group to receive service benefits and opposition was expressed to extra-billing when Trans-Canada Medical Plans were exploring the terms for a national policy.

Some specialist groups have requested increased fees and the General Practitioners' Association of Manitoba has given notice of motion to be discussed at the annual meeting. It is anticipated that the Chairman, Board of Trustees, Dr. P. H. T. Thorlakson, will present a report at the business session, also that names for replacement of retiring Board members will be presented at that time.

16.

"Medicine in Manitoba"

This book by Dr. Rosslyn B. Mitchell of the early days of medicine in this province was published by the author with financial assistance from the Association. Complimentary copies were distributed to various libraries and numerous reviewers. Following display at the conjoint meeting of the British, Canadian and Ontario Medical Associations additional copies of the

book were ordered and distributed. Copies are available at the Registration Desk and each member will wish to secure a copy which the author will autograph upon request.

17.

Membership

Membership continues to be maintained at a record high level. Fees payable by husband and wife when both are engaged in private practice were adjusted. A reduced fee was established for retired members who have reached the age of seventy years and have been in good standing for the previous ten years. The full C.M.A. fee is still paid on behalf of salaried personnel without a corresponding increase in the conjoint fee for such members. A reduced C.M.A. fee was remitted on behalf of certain members to whom complimentary membership was granted due to illness.

18.

Public Relations

Prolonged study has been given to the employment on a part-time basis of a lay consultant in public relations. The C.M.A. secretariat has been increased for that purpose and while attending the C.M.A. Public Relations Roundup in Chicago on August 31 and September 1, the Chairman of the Manitoba Public Relations Committee and Executive Secretary were privileged to meet Mr. L. W. Holmes to whom we may look for counsel.

19.

Red Cross

The Association was represented by the A/President at the 5th anniversary celebration of the inauguration of the Blood transfusion service. Demands for blood often surpass the collection potential and the co-operation of the profession in securing donors and avoiding abuses in ordering blood is earnestly solicited. During the year the Executive Secretary was invited to become a member of the local Management Committee.

20.

Rehabilitation

At a conference called by the C.M.A. in February "the third phase of Medicine" was stressed by Dr. G. F. Strong, President. A standing C.M.A. committee and a provincial counterpart were appointed. The latter became part of the Medical Advisory Committee to the Rehabilitation Commission and the activities of this group have been many and varied. Concurrence was given to the C.M.A. Statement of Policy concerning rehabilitation. The question of remuneration for treatment of indigent patients has been raised and recommendations may be far-reaching insofar as the profession is concerned.

21.

Victorian Order of Nurses

The duties of the representative to the national board have not been onerous and Dr. M. H. Campbell has continued as the nominee of this Association.

22.

Workmen's Compensation Board

The Fee Taxing Committee continues to function when requested by the Chief Medical Officer, and the negotiating Committee will report on terms of renewal of the new three-year contract concerning Fee Schedule.

* * *

23.

The reports which follow will outline several of the Association activities in greater detail.

The splendid spirit of co-operation manifest by Committee members has lightened the task imposed upon us during the current year.

To all, including the Executive Secretary, his able office assistants, Misses M. Graham and E. Armstrong, are due the appreciation of the Executive Committee.

Respectfully submitted.

R. Lyons,
A/President.
H. W. C. North,
Hon. Secretary.

24.

Finance

Winnipeg, Manitoba,
March 7, 1955.

To the Members,
Manitoba Medical Association,
Winnipeg, Manitoba.

Dear Sirs:

We have examined the balance sheet of the Manitoba Medical Association as at December 31, 1954, and the statement of revenue and expenditure for the year ended on that date, and have obtained all the information and explanations we have required. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances. We submit herewith the undenoted financial statements:

Exhibit

Balance Sheet December 31, 1954..... A
Statement of Revenue and Expenditure

for the year ended December 31, 1954..... B

The operations for the year, as set forth in Exhibit B, have resulted in net revenue of \$8,256.02. Membership fees collected are in accordance with duplicate receipts on file and were reconciled with the record of membership cards issued. The Association also received the customary sums of \$80.00 per month from the College of Physicians and Surgeons and \$110.00 per month from the Winnipeg Medical Society for their portions of office expenses. All expenditures have been properly authorized.

Cash on Hand and in Bank of Montreal — \$3,538.58:

We did not count the cash shown to be on hand. Subject to an allowance for outstanding items as shown by the books, the amounts shown to be on deposit in the current and savings accounts are in accordance with a certificate received from your bankers.

Accounts Receivable — \$1,568.50:

Of this amount \$107.69 remained outstanding at the date of this report. All accounts are considered to be collectible in full.

Investments — \$30,357.12:

During the year the following changes took place in this account:

Purchased:	Par Value	Cost
Province of Manitoba—		
4% October 1, 1961.....	\$5,000.00	\$5,225.00
Province of New Brunswick—		
3 1/2 % September 15, 1965.....	3,000.00	3,000.00
	\$8,000.00	\$8,225.00
Redeemed:		
Government of Canada—		
3% May 1, 1957.....	1,000.00	1,000.00
Net addition.....	\$7,000.00	\$7,225.00

We examined the securities and found them to be duly registered in the name of the Association. All bond interest has been accounted for on a received basis in the accounts of the Association.

Accounts Payable — \$231.67:

This account is comprised of the following items:

Osler, Hammond and Nanton.....	\$200.00
Allan and Hansbury Company Limited.....	31.67
	\$231.67

The liability to Osler, Hammond and Nanton is the result of an error on a statement received from them for the purchase by the Association of Province of Manitoba bonds.

In our opinion the accompanying balance sheet and statement of revenue and expenditure are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Manitoba Medical Association as at December 31, 1954,

and the result of its operations for the year ended on that date, according to the best of our information and the explanations given to us and as shown by the books of the Association. All the transactions of the Association that have come within our notice have been within the objects and powers of the Association to the best of our information and belief.

In conclusion we wish to express our appreciation of the co-operation given us during the course of our work.

Yours very truly,

THORNTON, MILNE & CAMPBELL,
Chartered Accountants.

25.

Exhibit "A"**Balance Sheet as at December 31, 1954****ASSETS****Current Assets:**

Cash on hand.....	\$ 140.00
In bank.....	3,398.58
	\$ 3,538.58

Accounts Receivable:

Review advertisers.....	\$ 1,243.38
College of Physicians and	
Surgeons.....	122.26
Defence Medical	
Association.....	46.00
Advance—J. G. Whitley.....	156.86
	1,568.50
	\$ 5,107.08

Investments:

(Market value \$31,050.00)

Bonds:

	Par	Cost
Government of Canada.....	\$ 5,000.00	\$ 5,150.00
Province of Manitoba.....	14,000.00	14,234.62
Province of		
New Brunswick.....	7,000.00	6,970.00
Hydro-Electric Power		
Commission of Ont.....	2,000.00	1,997.50
British Columbia		
Electric Co. Ltd.....	2,000.00	2,005.00
	\$30,000.00	30,357.12
		\$35,464.20

LIABILITIES**Current Liabilities:**

Accounts payable.....	\$ 231.67
Canadian Medical Association—	
Unremitted fees.....	40.00
Fees collected in advance.....	80.00
	\$ 351.67

Surplus Account:

Balance December 31, 1953.....	\$26,856.51
Add—Net revenue for the year.....	8,256.02
	35,112.53
	\$35,464.20

26.

Exhibit "B"**Statement of Revenue and Expenditure
For the Year Ended December 31, 1954****REVENUE****Fees collected:**

579 Members at \$40.00.....	\$23,160.00
32 Members at 20.00.....	640.00
119 Members at 5.00.....	595.00
36 Members at 15.00.....	540.00
7 Members at 43.00.....	301.00
6 Members at 21.00.....	126.00
2 Members at 25.00.....	50.00
3 Members at 8.00.....	24.00

2 Members at	7.50	15.00
2 Members at	2.50	5.00
		—

788 \$25,456.00

Add:
Arrears, 1953 40.00
Paid on account, 1954 fees 10.00

\$25,506.00

Winnipeg Medical Society 1,320.00
College of Physicians and Surgeons 960.00

Interest:
Bonds \$ 957.78
Savings account 62.50

— 1,020.28

\$28,806.28

EXPENDITURE

Salaries:
Dr. M. T. Macfarland \$ 6,000.00
M. Graham 2,006.50
E. Armstrong 637.58
R. Butler—left service 1,155.00

— \$ 9,799.08

Expense allowance—
Dr. M. T. Macfarland 1,200.00

Honorarium—
Estate of Dr. Hossack 1,250.00

Annual meeting:
C. M. A. \$ 38.36
M. M. A. 204.28

— 242.64

Audit fees 175.00

Business taxes 150.17

Entertainment 719.42

Executive luncheons 35.83

Fee schedules 1,725.43

General expenses 266.94

Illustrations — Review 311.23

Legal fees 235.00

Printing, postage and stationery 746.51

Radio broadcasts 1,067.48

Rent and light 1,800.58

28.

Statement of Revenue and Expenditure for the period 1st January, 1955, to 31st August, 1955

REVENUE

FEES COLLECTED:

	1955	Comparison 1954	Comparison 1953
628 Members @ \$40.00	\$25,120.00	578 @ \$40.00 \$23,120.00	508 @ \$40.00 \$20,320.00
½ year @ \$40.00	13 Members @ 20.00 260.00	8 @ 20.00 160.00	14 @ 20.00 280.00
½ year @ \$20.00	1 Member @ 10.00 10.00	95 @ 5.00 475.00	1 @ 30.00 30.00
Salaried @ \$5.00	95 Members @ 5.00 475.00	23 @ 5.00 115.00	115 @ 12.50 1,437.50
Salaried @ \$15.00	1 Member @ 15.00 15.00	24 @ 15.00 360.00	2 @ 6.25 12.50
1954 grads	16 Members @ 15.00 240.00	13 @ 20.00 260.00	58 @ 16.65 965.70
1955 grads	13 Members @ 20.00 260.00	3 @ 8.00 24.00	21 @ 8.32 174.72
Salaried Combined Fee	2 Members @ 8.00 16.00	7 @ 43.00 301.00	6 @ 37.00 222.00
Combined H. & W.	11 Members @ 30.00 330.00	6 @ 21.00 126.00	4 @ 9.50 38.00
½ year Combined	1 Member @ 10.00 10.00	5 @ 20.00 100.00	—
Retired	2 Members @ 21.00 42.00	2 @ 25.00 50.00	729 \$23,480.42
	5 Members @ 6.00 30.00	8 @ 15.00 120.00	Plus arrears 40.00
Post-Graduate	6 Members @ 20.00 120.00	—	1 chge. in cat. 17.50
Non-Resident	5 Members @ 13.00 65.00	772 \$25,211.00	1 spec. N.R. 12.50
	799 \$26,993.00	Plus arrears 40.00	
Plus arrears, 1954	30.00	Plus 1 o/a 10.00	
Plus one on account	30.00		
Plus C.M.A. refund for 2 deceased members	40.00		
Plus 2 divisional members	4.00		
	\$27,097.00		
		\$25,261.00	
			\$23,550.42

Brought Forward from Fees	\$27,097.00
College of Physicians and Surgeons	640.00
General Practitioners' Association	55.55
Winnipeg Medical Society	880.00
Bond Interest	788.75

EXPENDITURE

Salaries:	
Dr. M. T. Macfarland, including	
Expense Allowance	\$ 4,800.00
Miss M. Graham	1,600.00
Miss E. Armstrong	980.00
	\$ 7,380.00
Honorarium — Editor	1,000.00
Unemployment Insurance	33.34
Rent	1,230.40
Printing, Postage and Stationery	582.17
Medicine in Manitoba	1,257.84
Telephone	249.45
Light	51.71
Executive Luncheons	71.95
Travelling	908.85
Review Illustrations	172.72
Bank Charges	12.42
Fees, Complimentary	8.00
Office Miscellaneous	100.80
C.M.A. Annual Meeting	114.59
Entertainment	107.40
General Expense	28.45
Bond on Treasurer	8.00
Servicing typewriters	39.00
Auditors' Fee	175.00
Business Tax	165.31
Legal Expense	75.00
	\$ 13,772.40
	\$15,688.90

29.**Estimated Cost of Operation****1st September, 1955, to 31st December, 1955****REVENUE**

College of Physicians and Surgeons	\$ 320.00
Winnipeg Medical Society	440.00
Bond Interest	250.00

EXPENDITURE

Salaries	\$ 4,000.00
Rent	615.00
Unemployment Insurance	17.00
Light	30.00
Telephone	125.00
Printing, Postage and Stationery	250.00
Miscellaneous	200.00
Travelling Expenses	500.00
Annual Meeting	2,500.00
Review Illustrations	200.00
Honorarium	500.00
	8,937.00

Estimated Deficit for the period	\$ 7,927.00
Excess Revenue over Expenditure	

1st January, 1955, to 31st August, 1955 \$ 15,688.90

Estimated Net Excess Revenue for the year 1955 \$ 7,761.90

30.**Membership as at August 31, 1955***To the President and Executive of
The Manitoba Medical Association:*There are 958 doctors in the Province of Manitoba,
690 Winnipeg
268 Rural799 Active Paid-Up Members 567 Winnipeg
(781 in the Province) 214 Rural
18 Outside Province

9 Senior Members	5 Winnipeg
2 Complimentary Members, due to Ill Health	4 Rural
24 Retired	1 Winnipeg
	1 Rural
142 Membership Fees unpaid	20 Winnipeg
	4 Rural
958	99 Winnipeg
	48 Rural

Of the 142 doctors whose fees are unpaid, 20 are new registrants, 6 are interning in hospitals, 16 are in the Armed Services, 11 are not practising, 1 is in ill-health, leaving a potential of 88 from whom fees are collectible. On this basis, the percentage of paid-up membership is 90.8.

19 doctors have been lost to the Association during the year, 6 are deceased and 14 have left the province.

59 new members have been enrolled to date this year.

The number of paid-up members is higher by 31 than it was at this time last year. The total membership at the end of 1954 was 793.

Respectfully submitted.

*Jack McKenty,
Chairman.*

31. Cancer*To the President and Executive of
The Manitoba Medical Association:*

The Cancer Committee has had an extremely active year and hopes by its deliberations and agitations that clinical research in cancer has been placed on a sounder and more progressive basis than heretofore in Manitoba. At the outset of this report tribute must be paid to the untiring and stimulating co-operation of the University representatives on the Board of the Cancer Relief and Research Institute, Professor R. W. Pringle, Dean J. R. Weir, and Dean L. G. Bell.

During the past year the by-laws of the Cancer Institute were revised. According to the new by-laws the Medical Committee of the Cancer Institute is required to hold monthly meetings. Through these more frequent meetings the members of your Committee become better informed about the medical activities of the Institute and the excellent work being done by the Medical Director, Dr. R. J. Walton, in the administrative and therapy fields. Dr. Walton has become thoroughly conversant with the problems within the Institute and is now able to proceed with plans for increasing the efficiency and adequacy of cancer diagnosis and treatment for the people of Manitoba. Evidences of this are the installation of a Cobalt Beam Unit in St. Boniface Hospital, under the direction of Dr. S. Kramer, and the enlargement of the Forlong Clinic at the Winnipeg General Hospital.

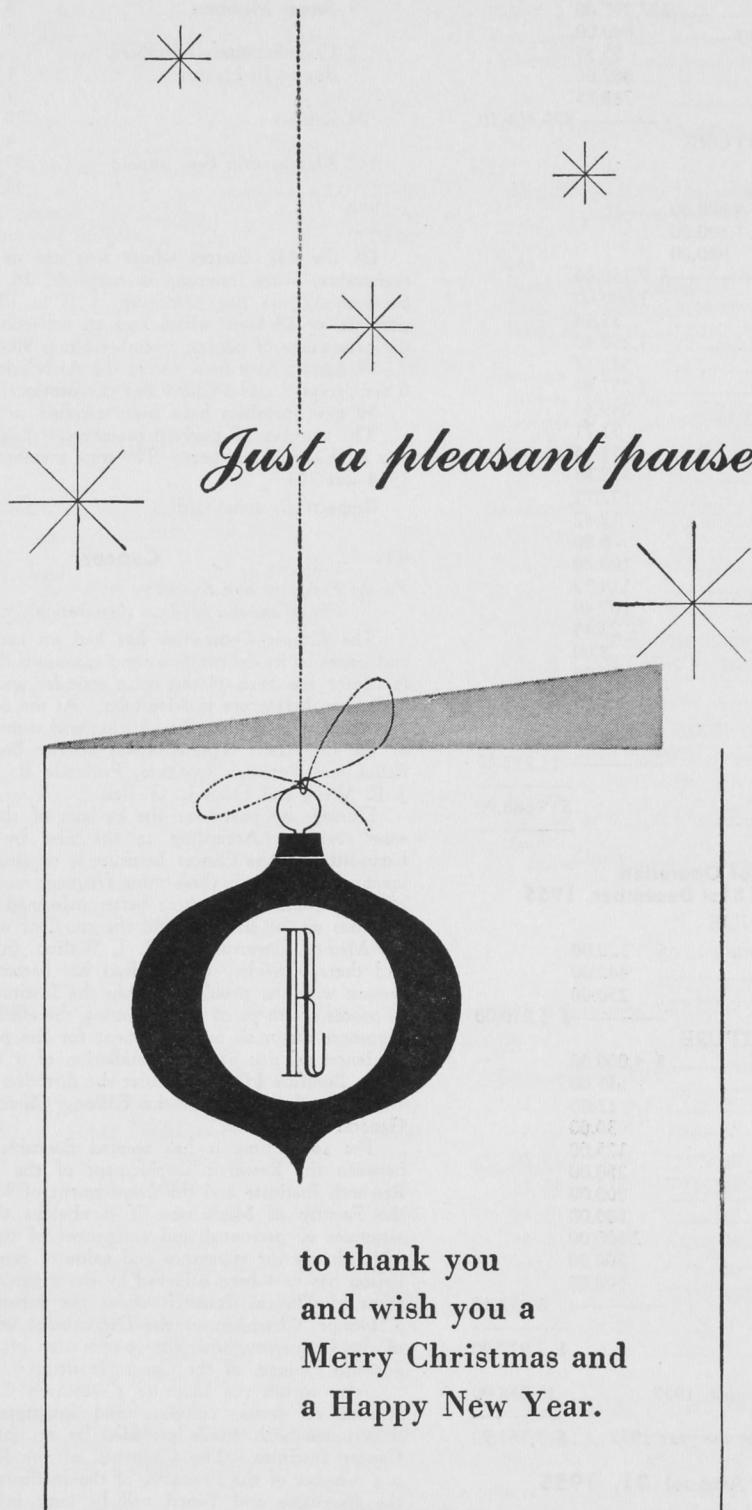
For some time it has seemed desirable that liaison exist between the Research Department of the Cancer Relief and Research Institute and the Department of Medical Research of the Faculty of Medicine. It is obvious that combining the resources of personnel and equipment of the two departments will enhance the substance and value of cancer research. This liaison has now been achieved by the organization of a Department of Clinical Research under the supervision of Professor J. Doupe, Chairman of the Department of Medical Research of the University, with the co-operation of Dr. R. J. Walton, Medical Director of the Cancer Institute.

Also within the Institute a Research Committee has been formed to assess, correlate and integrate research projects undertaken with funds provided by or obtained through the Cancer Institute. The Chairman of the Research Committee is a member of the Executive of the Institute thus assuring that the Executive and Board will be kept informed of research projects under Institute sponsorship.

An Isotope Committee has been organized for research in the diagnosis and treatment of malignant and non-malignant conditions.

Respectfully submitted.

*Elinor F. E. Black
R. O. Burrell
P. H. T. Thorlakson*



ROUGIER FRERES, 350 LE MOYNE STREET, MONTREAL

32.

Civil Defence Medical Arrangements

To the President and Executive,
Manitoba Medical Association:

As you know, we had one meeting with Brigadier Bryce, Brigadier R. M. Malone, Colonel A. C. Delaney and Dr. M. R. Elliott concerning the appointment of a full time medical planner. This was deemed inadvisable and we finally decided that if we could obtain someone to draft a plan on a part-time basis, the presently constituted committee would be glad to assist him in any possible way. Colonel Carl Wood, the Commanding Medical Officer of Prairie Command, signified his willingness to do this and he was approached by Dr. Elliott and Dr. Tanner and has undertaken this task.

On the 11th of October, 1955, we had a meeting at which Colonel Wood presented a rough outline of the plan he had in mind. This, as he pointed out, would require considerable elaboration and much attention to detail, but the overall plan met with approval of everyone present. Colonel Wood plans on keeping in close touch with you and with the members of the Committee as well as with the Metropolitan Civil Defence and Provincial Civil Defence Headquarters during the next few months as this plan is gradually elaborated.

Respectfully submitted.

J. T. MacDougall,
Chairman.

33.

Constitution and By-laws

To the President and Executive of
The Manitoba Medical Association:

It was with a great deal of pleasure that I acted as Chairman for the Committee on Constitution and By-laws. It was particularly gratifying to work with Dr. J. A. Findlay and Dr. W. J. Boyd, who were members of this Committee.

There were two proposed amendments brought forth by the Committee:

(1) That Article 8 of the Constitution be amended to read:

"All accounts for payment shall be signed by the President, Vice-President, Honorary Secretary, or Executive Secretary, and cheques shall be signed by any two of the following: Honorary Treasurer, President, Vice-President, Honorary Secretary, or Executive Secretary."

(2) Modification of Article 6B, page 4, to be amended as follows:

"In case of a vacancy in any office on account of death or otherwise, the Executive Committee may appoint a member to take the place of a vacancy upon the Executive until the next Annual Meeting, at which time a member shall be elected to complete the unexpired term."

The Committee would further draw the Association's attention to the following amendments in the By-laws of the Canadian Medical Association, which took place in August, 1954, in Toronto:

(a) In regard to the standing committee on Archives:

"It was also decided that a Standing Committee on Archives be set up with definite terms of reference, and the recommendation was made that the Committee on Archives shall maintain a record of the activities of the Association and biographical material on the members."

(b) In regard to the following establishments in the Canadian Medical Association.

1. To establish a Standing Committee on Maternal Welfare — Chairman, Dr. Thomas Primrose, Montreal.
2. To establish a Standing Committee on Industrial Medicine — Chairman, Dr. Harvey Cruickshank, Montreal.
3. To establish a Standing Committee on Nutrition — Chairman, Dr. J. F. McCreary, Vancouver.
4. To discontinue the Committee on Mental Hygiene and request the Canadian Psychiatric Association keep the C.M.A. advised of developments through its representatives on the General Council.

(c) Section on Ethics:

It is recommended that the term "disgraceful conduct" be replaced by "conduct which the Council considers unethical." This to be recommended to C.M.A. by Dr. Hollenberg.

Respectfully submitted.

Jacob Hollenberg,
Chairman.

34.

Economics

To the President and Executive of
The Manitoba Medical Association:

During the past year the Committee on Economics has been interested in several subjects.

1. It received from the Economics Committee of the C.M.A. a draft of a new document entitled "Statement of Policies and Principles on Health Insurance in Canada." This represents a consolidation of two earlier studies involving the C.M.A. attitude toward pre-paid health insurance, viz., the Principles relating to Health Insurance drawn up in 1944 and the later statement of Policy in 1949. Although the policy of the C.M.A. remains unaltered on health insurance the new document correlates the original conception of patient participation and includes an additional section dealing with organization of health services for economy and efficiency. This has been done in order to demonstrate the profession's attitude, responsibility and willingness to participate in any reasonable scheme which may result from further governmental interest in matters pertaining to health. Material no longer of significance has been deleted.

After a review of this new statement the Committee recommended its approval by the Executive of this division. Following its favorable reception the statement was returned to the Committee of Economics, C.M.A., for final consideration prior to its presentation at the Annual Meeting of Council in June at Toronto.

2. Federal Health Grants: As a result of these grants provided by the Canadian government, funds have become available if matched by similar sums from provincial governments. The policy adopted by the federal and provincial governments require those hospitals to which assistance from that part of the grants are available for the establishment of laboratory and radiological services provide these services on a nonprofit basis. The policy and contract between hospitals and government was studied by the Economics Committee and the terms involved appeared reasonable and generous. The principle underlying involved restrictions is based upon the need to restrict the high cost of auxiliary services which have become so burdensome in the practice of modern medicine. It is understood that in Winnipeg the three principal teaching hospitals, Children's, General and St. Boniface have made use of the health grants in the establishment of laboratory and X-ray diagnostic services. Other hospitals may be contemplating sharing in the grants.

3. Rehabilitation: The Medical Advisory Committee appointed by the Executive of this division has assisted in the formation of policy in the presently established Rehabilitation programme in Manitoba. Matters pertaining to this subject are included in the report of the above Committee, the chairman of which is Dr. Hartley Smith. The Economics Committee has been privileged to be included in its discussion and observed the development of principles which are consistent with present medical practices as they are related to patient and doctor. It is of interest to observe the entry by lay agencies into the practice of medicine in the care of indigent and medically indigent patients. As a result it may be recognized that these agencies represent on additional economic factor in medicine supported by a sympathetic public and generous government grants. In this new picture, doctors are receiving recompense for services performed for patients who could otherwise pay nothing or perhaps would never have medical assistance made available to them. On the other hand some of the traditional independence doctors have enjoyed may be curbed by restrictions involved in new associations. To some degree doctors become, in effect, employees and as such must brook some interference from the employing agency.

DESPITE PRESENCE OF MUCINOUS MATERIAL AND BLOOD SERUM

ALL TRICHOMONADS

ARE DESTROYED IN 30 SECONDS!¹

The new trichomonacide, VAGISEC*, jelly and liquid, clears up even stubborn clinical cases of vaginal trichomoniasis. Used with the Davis technique, it penetrates to hidden trichomonads—ends treatment failure and flare-ups.



VAGISEC liquid penetrates to trichomonads buried among the vaginal rugae.

*Trichomonads explode within seconds—through synergistic action. VAGISEC liquid combines a chelating agent to complex and remove the trichomonad's calcium, a wetting agent to remove its lipid material, and a detergent to denature its proteins. The parasite imbibes water, swells up and explodes—15 seconds after douche contact. "Even in the presence of blood serum and mucinous material all are destroyed within 30 seconds."¹ Explosion succeeds, for ". . . over 90% of apparent cures have been obtained . . ."¹ with VAGISEC liquid. It is ten times as lethal to *T. vaginalis* as other available douche powders in *in vitro* comparisons.¹ Note that VAGISEC jelly stays in the vagina to destroy trichomonads at night.*

The Davis technique.[†] Dr. Carl Henry Davis, well-known gynecologist and author, and C. B. Grand, research physiologist, introduced this new trichomonacide as "Carlendacide." Over one hundred leaders in obstetrics and gynecology tested it clinically and found it a remarkably fast-acting, effective therapy. VAGISEC jelly and liquid are non-toxic and non-irritating, leave no messy discharge or staining. Doctor Davis recommends a combination of office and home treatment. "A few women have infected cervical, vestibular or urethral glands and require other types of treatment . . ."¹

Office Treatment. Expose vagina with speculum. Wipe walls dry with cotton sponges and wash thoroughly for about three minutes with a 1:250 dilution of VAGISEC liquid. Remove excess fluid with cotton sponges. Dr. Davis recommends six office treatments.

Home Treatment. Patient inserts VAGISEC jelly each night and douches with VAGISEC liquid (2 teaspoonfuls in 2 quarts of warm water) each morning except on office treatment days. Continued douching two or three times a week helps to prevent re-infection. Pregnant women should have office treatments only.

1. Davis, C. H.: West. J. Surg. 63:53 (Feb.) 1955.

*TRADE-MARK †PAT. APP. FOR

JULIUS SCHMID (Canada) Ltd.

32 Bermondsey Road, Toronto 16, Canada

ACTIVE INGREDIENTS: POLYOXYETHYLENE NONYL PHENOL, SODIUM ETHYLENE DIAMINE TETRA-ACETATE, SODIUM DIOCTYL SULFOSUCCINATE. IN ADDITION, VAGISEC JELLY CONTAINS BORIC ACID, ALCOHOL 5% BY WEIGHT.

Thus in the matter of payment to doctors for services to indigents and supervision in their work there is a departure from established principles. As a consequence, new measures of the above nature require a continuing well informed attitude by the profession.

4. General Practitioners' Association. The Economic Committee has been requested by the Executive to study a motion by the Association as it affects the Manitoba Medical Service. The motion is as follows:

"Be it resolved that the Manitoba Medical Service adopt one fee across the board for all participating medical members; and this shall follow the minimum schedule of fees as prepared in 1954; and that the privilege of extra billing be granted to all specialists."

The Committee has met on several occasions in order to study the motion. It is noted that three principles are involved. It would appear that elimination of the fee differential between general practitioner and specialist and the inclusion of extra billing for specialist are the more important. The Committee recognizes that there is room for wide discussion before such a motion is decided. Ample support for the motion or its defeat is obvious. The Committee feels at the time of writing of this report that a body representative of all blocs of the profession should consider the motion on the basis of the requirements and wishes of such groups. This is consistent with the verdict recorded at the Annual Meeting of the division in 1951 when a similar motion was replaced by an amendment asking such a study. This decision has never been implemented. In view of changing policies within the M.M.S. the motion should be deferred while its principles are re-considered by a special study group.

Respectfully submitted.

K. R. Trueman,
Chairman.

35.

Editorial

To the President and Executive of
The Manitoba Medical Association:

The Editorial Board has taken over its duties in March, 1955. Since then it held two meetings, at which careful plans were laid down for smoother functioning of the Review. Co-operation was assured with regard to securing a steady flow of material for publication from local contributors, as well as visiting guest speakers, and Manitoba graduates doing post-graduate work in larger centres.

A scheme was evolved for setting up the following permanent departments to publish items at frequent intervals: history of medicine, abstracts from current literature, problems of the newborn, clinico-pathological conferences, hospital rounds, questions and answers.

A request for additional \$300 per annum for financing of photographs and x-ray reproductions, which accompany published articles, was graciously granted by the Manitoba Medical Association.

Recommendations for increasing readership, as well as obtaining more contributions, by enlisting the interest and co-operation of our colleagues in Saskatchewan were made by the Board.

Respectfully submitted.

S. Vaisrub,
Editor.

36.

Editorial Committee to C.M.A. Journal

To the President and Executive of
The Manitoba Medical Association:

Beginning with January, 1955, the Canadian Medical Association Journal took the forward step of having two issues each month. Dr. H. Ernest MacDermot who for over a decade so ably edited the Journal, retired at the Annual Meeting of the Canadian Medical Association on June 22nd when fitting tribute was paid to his work. He has been succeeded by Dr. Stanley S. B. Gilder, an able linguist,

formerly with the Editorial Department of the British Medical Association and the Administrative staff of World Health Organization at Geneva. He comes with the recommendation of Dr. Hugh Clegg, Editor of the British Medical Journal.

Manitoba doctors have continued to contribute articles to the C.M.A. Journal. Up to the time of the writing of this report they have been: Doctors B. H. Lyons, R. Lyons, A. Gibson, A. J. Glazebrook (2), P. H. T. Thorlakson, W. Forster, Stuart Schultz, D. Oatway, D. Parkinson (2), A. E. Childe, R. H. James, M. Bruser, R. T. Ross, P. Enns, L. G. Bell (2), S. Malkin. Dr. J. B. R. Cosgrove, formerly of Winnipeg but now of Montreal, reported on the 1953 outbreak of poliomyelitis in Manitoba

Items of medical interest in Manitoba and obituaries have appeared regularly in the Journal, and the Annual Meeting of the Manitoba Medical Association was reported.

The C.M.A. Journal is Canada's national medical publication and is quoted frequently in world medical literature. Manitoba authors are urged to make the Journal their medium when they have anything of note to communicate to the medical world.

Respectfully submitted.

Ross Mitchell,
Chairman.

37.

Fee

To the President and Executive of
The Manitoba Medical Association:

Three meetings of the Committee were held with Drs. R. Lyons, Chairman, P. H. McNulty, C. H. A. Walton, the Executive Director of Manitoba Medical Service and Executive Secretary of the Manitoba Medical Association, in attendance. Requests from individuals, groups, and Manitoba Medical Service, were considered by the Committee. Various items were deferred until the special committee appointed by the Executive Committee to consider procedures for which Manitoba Medical Service should be responsible. Executive approval was given to the minutes and they were passed to Manitoba Medical Service.

Respectfully submitted.

R. Lyons,
Chairman.

38.

Historical Medicine and Necrology

To the President and Executive of
The Manitoba Medical Association:

"The valiant never taste of death but once,
Of all the wonder that I yet have heard
It seems to me most strange that men should fear;
Seeing that death, a necessary end,
Will come, when it will come . . . "

Julius Caesar.

In the spirit of this fine note of courage, we bid farewell to our colleagues, who have passed from our midst. They need no monument, for their works live after them. They take their place in the long procession, trooping down through the corridors of time and history.

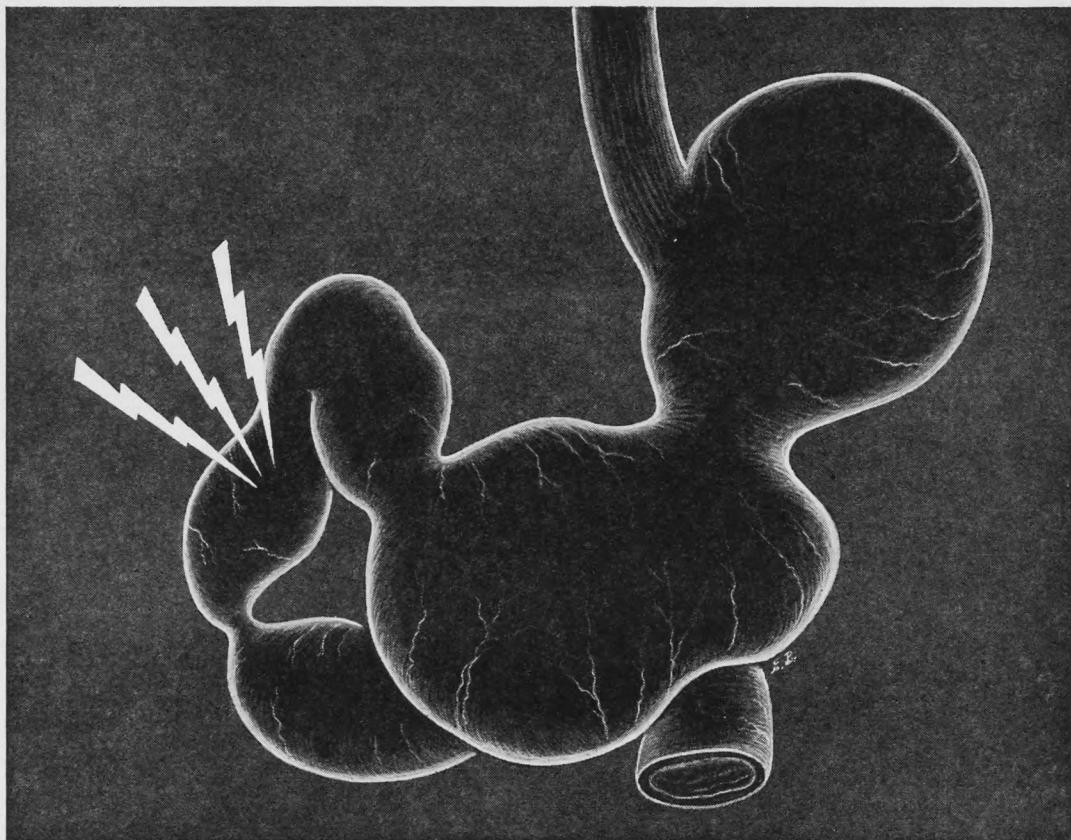
In remembering them let us renew our pledge to serve our brothers and sisters. Let not the note of human kindness be drowned by the bell sound of the cash register. They have been an inspiration to us and let us pray that we prove worthy to follow in their footsteps.

Dr. W. G. Beaton, Winnipeg
Dr. Charles Hunter, Winnipeg
Dr. Solomon Kobrinsky, Winnipeg
Dr. H. J. Scott, Winnipeg
Dr. C. M. Strong, Winnipeg.
Dr. T. D. Wheeler, Winnipeg.

Respectfully submitted.

Athol Gordon,
Chairman.

PRO-BANTHINE FOR ANTICHOLINERGIC ACTION



Abnormal Motility as the Cause of Ulcer Pain

Until recently the general opinion was held that ulcer pain was primarily caused by the presence of hydrochloric acid on the surface of the ulcer.

Present investigations^{1,2} on the relationship of acidity and muscular activity to ulcer pain have led to the following concept of its etiologic factor:

"... abnormal motility² is the fundamental mechanism through which ulcer pain is produced. For the production and perception of ulcer pain there must be, one, a stimulus, HCl or others less well understood; two, an intact motor nerve supply to the stomach and duodenum; three, altered gastro-duodenal motility; and four, an intact sensory pathway to the cerebral cortex."

Pro-Banthine® has been demonstrated consistently to reduce hypermotility of the stomach and intestinal tract and in most instances also to reduce gastric acid-

ity. Dramatic remissions¹ in peptic ulcer have followed Pro-Banthine therapy. These remissions (or possible cures) were established not only on the basis of the disappearance of pain and increased subjective well-being but also on roentgenologic evidence.

Pro-Banthine Bromide (Beta-diisopropylaminoethyl xanthene-9-carboxylate methobromide, brand of propantheline bromide) has other fields of usefulness, particularly in those in which vagotonia or parasympathotonia is present. These conditions include hypermotility of the large and small bowel, certain forms of pylorospasm, pancreatitis and ureteral and bladder spasm.

1. Schwartz, I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: A Clinical Evaluation of a New Anticholinergic Drug, Pro-Banthine, Gastroenterology 25:416 (Nov.) 1953.

2. Ruffin, J. M.; Baylin, G. J.; Legerton, C. W., Jr., and Texter, E. C., Jr.: Mechanism of Pain in Peptic Ulcer, Gastroenterology 23:252 (Feb.) 1953.

39.

Hospital Liaison

To the President and Executive of
The Manitoba Medical Association:

Your Committee held one meeting during the year, at which general problems were discussed.

One specific problem was brought to the attention of your chairman. This was discussed and settled amicably with the president of the medical staff of the hospital concerned.

No specific problems were presented to your committee by the Executive of the M.M.A.

Respectfully submitted.

C. E. Corrigan,
Chairman.

40.

Legislation

To the President and Executive of
The Manitoba Medical Association:

From time to time the Executive of the Manitoba Medical Association has had to deal with legislation or proposed legislation that affects the profession. A problem concerning the psychiatrists was discussed in regards to mandatory inquests into all deaths resulting from electric shock therapy. In deaths subsequent to other forms of therapy, the coroner may order an inquest at his discretion. The reason for the holding of inquests in electric convulsive therapy deaths is because the coroner has received a verbal directive from the attorney-general's department.

This matter was referred to the attorney-general's department by the College of Physicians and Surgeons of Manitoba, and a reply was received from the deputy attorney-general to the effect that there were no regulations under the Coroner's Act or the Hospitals Aid Act making inquests mandatory in any case of death from any cause, but that the coroner could order an inquest if he considered it to the public interest. Our solicitor can find no law that gives the attorney-general overriding powers over the coroner in this regard.

The situation is of utmost concern to the profession and to the public, because there are many cases requiring shock therapy that are poor risks and it is understandable that a psychiatrist faced with an inevitable inquest in case of death, would hesitate for the reason that an inquest in the minds of the public implies that there is something wrong, when in effect, modern treatment is given in an institution by a competent, well trained specialist. To treat him differently than a surgeon, obstetrician or gynecologist would be treated under similar circumstances is to discriminate against one group of specialists. The public is vitally concerned because if the risk of death is very great a patient may be denied his only hope of recovery.

Our Secretary and solicitor met with the attorney-general and he agreed with the profession that the coroner should be the sole judge as to whether an inquest was necessary in any case, including those involving electric shock therapy. The attorney-general was willing to give the coroner his complete confidence in this regard.

Respectfully submitted.

L. A. Sigurdson,
Chairman.

41.

Maternal Welfare

To the President and Executive of
The Manitoba Medical Association:

The committee wishes to submit the following report for the year 1954, based upon information supplied by the Division of Statistics, Department of Health and Public Welfare.

The maternal death rate per 1,000 live births was 0.4, there being 10 maternal deaths in 22,465 live births. This compares with previous years as follows:

Maternal Mortality Rates Per 1,000 Live Births

Manitoba 1949-1954

1949	1950	1951	1952	1953	1954
1.3	0.7	1.1	0.5	0.8	0.4

The causes of death were as follows:

Toxaemias of Pregnancy	2
Edampsia (ante partum)	1
Chronic Nephritis	1
Haemorrhages	2
Intra-abdominal (ectopic)	1
Postpartum	1
Renal failure	2
Both due to transfusion reactions in abortions	
Embolism	2
Pulmonary embolus 13 days following	
Caesarean section	1
Massive air embolus following induced abortion	1
Infection	2
Septicaemia 12 days following	1
Caesarean section for placenta praevia	
Congestive heart failure	1
5 hours following forceps delivery	

It is noted that there is not one outstanding cause of death this year. Further information obtained from the Maternity Mortality reports submitted reveals the following:

- 1) The patient dying from chronic nephritis had not been pregnant for two years but had apparently developed the nephritis during a pregnancy.
- 2) There was no history of previous heart disease in the patient dying of congestive heart failure and there was no autopsy to confirm the diagnosis.
- 3) It is regrettable to note that there were only 2 autopsies carried out among the 10 deaths.

4) It is alarming to note 2 of the deaths due to renal failure were attributed to blood transfusions. This emphasizes the danger of transfusing pregnant women.

5) Infection is still a real danger to the pregnant woman. One patient died of septicaemia following a Caesarean section. This occurred in a city hospital where all modern facilities were available.

6) The one case of postpartum haemorrhage was an Indian who had no medical attendant. However, the patient who died from haemorrhage from an ectopic pregnancy was in a city hospital 3 days before death and no operation performed.

As was noted in this report last year I would again like to draw attention to the poorly completed Maternal Mortality Enquiry forms. I would request at this time greater co-operation from the attending physician in this matter and also in securing more autopsies.

Respectfully submitted.

W. J. McCord,
Chairman.

42.

Medical Education

To the President and Executive of
The Manitoba Medical Association:

The Committee on Medical Education met during the year to discuss the educational facilities for the practicing physicians in Manitoba.

The following are presently available:

- (a) The Scientific program at the annual meeting of the Manitoba Medical Association.
- (b) The Annual Refresher Course held under the auspices of the Committee on Post Graduate Studies of the Faculty of Medicine of the University of Manitoba.
- (c) The meetings of the Winnipeg Medical Society and the District Medical Societies.
- (d) The Ward Rounds and Clinical Luncheons of the various hospitals in Winnipeg.
- (e) The annual series of weekly lectures given in Winnipeg, arranged by the General Practitioners' Association. Special lecture series, such as those arranged by the Department of Physiology and the Department of Surgery, University of Manitoba, are held from time to time in Winnipeg.
- (f) The meetings of various specialized groups, such as the Medical Historical Society, the Medico-Legal Society and various sectional meetings of Specialists groups.

During PREGNANCY and LACTATION



"FERROGEN" COMPOUND

Tablet No. 450 "Frost"

Each sugar-coated tablet contains:

Ferrous sulphate B.P.	... 325 mg. (5 gr.)
*Bone flour (edible)	.... 325 mg. (5 gr.)
Vitamin D	..... 500 I.U.
Vitamin A acetate	..... 1500 I.U.
Vitamin B ₁	..... 1 mg.
Riboflavin	..... 1 mg.
Niacinamide	..... 5 mg.
Vitamin C	..... 30 mg.
Sodium iodide	... 0.2 mg. (1/325 gr.)

*Average content: calcium 110 mg., phosphorus 50 mg., fluorine 0.4 mg., and other trace elements.

Packaged in bottles of 100 tablets.



IRON
CALCIUM
IODINE
AND
VITAMIN
TABLET

DOSAGE: In order to establish tolerance to iron, full dosage should be arrived at gradually. One tablet daily after the main meal for several days, increase to two tablets daily, one after breakfast and after lunch for several days and, finally, one tablet three times daily after meals.

Charles E. Frost & Co.
MONTREAL

CANADA

The Committee came to the conclusion that these meetings were excellent and should be carried on in their present form. However, the Committee felt that further consideration should be given to increasing the educational opportunities for the rural practitioner in hopes of helping him to overcome difficulties of time and travel in attending many of these meetings. It was proposed to hold a "clinical day" in various areas under the auspices of the local District Medical Society. The emphasis in these clinical days was on the actual presentation of patients and the discussion of treatment of these patients. As well as this, short talks were given by the team of "visiting firemen" who attended these meetings. Six of these clinical days were held during the year 1954-55, as well as two regular meetings of district Medical Associations. From discussing the value of the clinical days with the physicians who attended, the impression was gathered that they appeared to be a very worth-while contribution to the education of the physicians.

The annual meeting of the Manitoba Medical Association had its usual large attendance of physicians. The Annual Refresher Course was held from April 4th to 7th and was attended by 73 physicians. On the day prior to the Annual Refresher Course, the Committee on Post Graduate Education of the Faculty of Medicine of the University of Manitoba, in conjunction with the Lederle Laboratories, held a symposium on "Modern Trends in Treatment." The calibre of the six visiting speakers, as well as the entertainment tendered, made this day a resounding success. The symposium was attended by 352 doctors and 92 medical students.

Recently, the Department of Pediatrics of the University of Manitoba, Faculty of Medicine, has received a sum of money to promote education of the practicing physicians in matters pediatric.

Recommendation that the principle of "Clinical Days" be continued. A definite time-table for the days of these "Clinical Days" should be established well in advance, and that the district Medical Societies should forward the dates for their meetings as soon as possible in the fall of the year.

Respectfully submitted.

J. P. Gemmell,
Chairman.

43.

Pension Plan

To the President and Executive of
The Manitoba Medical Association:

I am pleased to inform you that I have succeeded in having the Manitoba Medical Service strike a Committee to help us implement a pension plan for the participating members.

We are informed that it will be necessary to change the verbiage of our present contract with the Manitoba Medical Service to enable us to obtain this pension as employees of the Manitoba Medical Service.

Respectfully submitted.

Michael S. Hollenberg,
Chairman.

44.

Post-Graduate

To the President and Executive of
The Manitoba Medical Association:

The Chairman of this committee was again Dr. D. S. McEwen and the hard working Secretary-Treasurer, Dr. J. P. Gemmell.

The first day of this program, April 4, 1955, consisted of a Symposium on Modern Trends in Treatment, sponsored by the Manitoba Medical Association, The Committee for Post Graduate Studies, Faculty of Medicine, University of Manitoba and Lederle Laboratories. The following three days the meetings were held at the Children's Hospital of Winnipeg, the St. Boniface Hospital and the Winnipeg General Hospital.

Dr. Gemmell intends to submit a more detailed report regarding this course. All who attended agreed that it was highly successful.

Respectfully submitted.

Arthur E. Childe,
Representative.

45.

Public Health

To the President and Executive of
The Manitoba Medical Association:

The committee was represented at a film preview of "We Want a Baby." The production was promoted by The Canadian Child Health Association to inform the public of the problems of sterility, illegitimacy, and abortion. This film was found to be essentially accurate and was recommended as suitable health education material to meet the need.

The committee kept in touch with the nucleus committee on public health, Canadian Medical Association, on matters under discussion relevant to Manitoba. Inquiry was made into the use of resuscitators by non-medical personnel in various areas of the Province. A report was submitted on the extent to which these machines are used in Manitoba. The possible misuse of such equipment has prompted continued study.

Efforts were also made to gather data on the medical screening of certain applicants for motor vehicle licenses in this Province. This information is being gathered across the nation in an attempt to reduce traffic hazards.

In the interest of reducing neonatal, and in particular natal-day mortality, most hospitals are placing their nurseries under the direct supervision of the paediatric staff. As this practice is not always adopted, even in Manitoba, and because the Canadian Medical Association has not yet declared its policy towards such matters, your committee felt it advisable to gather more information on the subject and request the Canadian Medical Association to declare a policy. This action received the support of the M.M.A. executive and the matter has been referred to the incoming nucleus committee on public health.

Respectfully submitted.

John Scatiff,
Chairman.

46.

Public Relations

To the President and Executive of
The Manitoba Medical Association:

This year has been one in which your committee was entrusted with a great deal of work in the many fields of public relations.

The newspapers, the most powerful media of public relations, have been exceedingly fair and co-operative in the reporting of medical news and in their editorials. If, at times, it seems that the newspapers have been unfriendly, it is usually because information of public interest has been withheld or delayed. This is of vital importance because time is the essence of newspaper reporting.

The same thing cannot be said of certain magazine articles, some of which wonder whether you can trust Canadian doctors with your life. A consultation at the national level elicited the sound advice that it was best to ignore these in order not to start a controversy.

During the last year on television a series of medical programmes endorsed by the Canadian Medical Association under the title "Medic" was presented weekly. On the whole these were well received by the public.

An organized attack by the Anti-vivisection Society was directed against members of our profession who are doing research at the medical college. In spite of strong protests from some members of our profession against the "wall of silence" of your Association, we were advised from many reliable sources not to engage in this controversy because we had faith in the maturity of the city fathers on this point.

The Winnipeg Medical Society requested the Association to consider again the hiring of a professional Public Relations Consultant on a part-time basis. Your Association was of the opinion that if such a consultant were hired it should include not only the Winnipeg Medical Society, the Manitoba Medical Association, but also the Manitoba Medical Service and the College of Physicians and Surgeons in order not only to co-ordinate all our activities in the field of public relations, but also to help share the expense. The Winnipeg Medical Society with assets of \$8,881.54 and the Manitoba Medical Association

INTRACTABLE
PAIN

LARGACTIL

R.P. 4560 - CHLORPROMAZINE

REDUCES THE NEED
FOR NARCOTICS
IN
ALL SEVERE PAINFUL
CONDITIONS

TABLETS - ORAL DROPS - SUPPOSITORIES - AMPOULES



Poulenc Limited

204 Youville Square, Montreal

Information upon request

with assets of \$35,464.20, would have appreciated the co-operation of the College of Physicians and Surgeons with assets of \$74,390.08, less commitment up to \$11,000.00 for furnishing auditorium in new Medical College Building, and the Manitoba Medical Service with an income last year of \$4,042,263.86. The Executive Committee of the College of Physicians and Surgeons "was reluctant to recommend to Council the employment of a non-medical consultant in public relations on a part-time basis," and the Executive Committee and Finance Committee and the Board of Trustees were "against the use of M.M.S. funds for this laudable object." The refusal of the Manitoba Medical Service and the College of Physicians and Surgeons to participate in this project precipitated the resignation of two members of the Public Relations Committee.

Prior to attempting a co-ordinated public relations effort, an exhaustive investigation was carried out by writing to Medical Associations in Canada and the United States, and also some of the largest commercial organizations. It is interesting to note that the following States are employing a public relations consultant: California, Connecticut, Florida, Illinois, Indiana, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee and Washington.

Respectfully submitted.

L. A. Sigurdson,
Chairman.

47.

Rehabilitation

To the President and Executive of
The Manitoba Medical Association:

In the province of Manitoba the over-all control of rehabilitation is in the hands of a Rehabilitation Commission created by the Government of Manitoba in June, 1954. In order to act as medical advisors to this body a committee was created in January, 1955, which is made up of two lay members, Mr. Walter Boyd, the Provincial Co-ordinator of Rehabilitation Services and Mr. S. C. Sparling, the Executive Director of the Society for Crippled Children and Adults; and sixteen medical members, Dr. J. D. Adamson, Dr. A. J. Alcock, Dr. M. H. L. Desmarais, Dr. M. R. Elliott, Dr. D. J. Fraser, Dr. A. M. Goodwin, Dr. T. E. Holland, Dr. John Hughes, Dr. M. S. Lougheed, Dr. J. K. Martin, Dr. E. W. Pickard, Dr. J. G. Pincock, Dr. R. T. Ross, Dr. Hartley Smith, Dr. P. H. T. Thorlakson, Dr. F. R. Tucker.

When a rehabilitation committee was appointed by your executive they were invited to become members of the Advisory Committee, and the chairman of the Manitoba Medical group was appointed chairman of the Advisory Committee. This arrangement was accepted with pleasure by your committee as it was felt that in this way the greatest possible contribution to the organization of a rehabilitation programme could be made. Two meetings of the nucleus Manitoba Medical Committee and six meetings of the full Medical Advisory Committee have been held, and in all our deliberations we have attempted to keep certain basic principles in mind.

1) That wherever possible the normal doctor-patient relationship shall be maintained and that we will do our best to avoid the creation of still another agency to take over the treatment of a large group of patients.

2) To see that reasonable payment is made for service rendered.

3) To see that consultants are called in a fair and impartial manner.

4) To avoid reduplication and overlapping of services provided.

In line with the above principles the following are some of the recommendations that have been made to the Rehabilitation Commission:

(1) That in order to provide a co-ordinated rehabilitation service for all the disabled in Manitoba and to make the maximum use of our existing resources we recommended that the Society for Crippled Children be asked to undertake the development of a rehabilitation assessment and follow-up service for both adults and children.

(2) That rehabilitation teams be established in the Winnipeg General Hospital and the St. Boniface Hospital, subject to agreement being reached between the Society for Crippled Children and the two hospitals concerned, regarding such items as method of appointment of chairman to teams, method of remuneration to consultants, methods of referral of patients, etc.

(3) That all referrals for rehabilitation services be made initially to the office of the provincial co-ordinator where they will be registered in a central disabled persons registry. They may then be referred to the Central Agency (Society for Crippled Children) for assessment and follow-up. In the case of private patients, diagnosis and treatment will be carried out by the patient's own doctor but the Central Agency will assist the patient in securing non-medical rehabilitation services such as vocational assessment and training.

(4) That in cases where special treatment is indicated the family doctor be consulted and requested to name a specialist to carry out the required treatment. If the patient's own doctor has no choice of specialist one may be selected by the rehabilitation assessment team from the specialist's registry of the College of Physicians and Surgeons; the selection to be made in rotation.

(5) That the Society in conjunction with local medical groups, operate such diagnostic clinics either in rural or urban areas as may be necessary to provide a comprehensive assessment and follow-up service to the disabled children and adults of Manitoba.

(6) That the fees paid shall be according to the schedule laid down by the Manitoba Medical Association.

The Society for Crippled Children has undertaken to extend its services to include adults and is prepared to function in this new role early this fall. It is expected that many difficulties will be encountered and it will be the constant aim of your Committee to settle these differences in a manner that will not only be fair to the patient but will protect the rights of the individual practitioner.

Respectfully submitted.

F. Hartley Smith,
Chairman.

48.

Society for Crippled Children

To the President and Executive of
The Manitoba Medical Association:

The Society for Crippled Children of Manitoba has made a major change in policy this year. The Society has taken over the rehabilitation of Disabled Adults on a trial basis at the present time.

The Government has granted the Society approximately \$90,000.00 each year to care for this work. This plan has been closely followed and recommendations to the Government and Crippled Children's Society have been made by the M.M.A. Medical Advisory Committee set up for this purpose.

To handle this problem a Chairman has been appointed for the Winnipeg General and St. Boniface Hospitals. He will designate from the Staff of these hospitals the examiners on a rotating basis, for treatment for these disabled Adult Clinics. The first one was held in September.

It is important from the M.M.A. policy, I believe, that three Principles should be endeavoured to be used:

First, is the use of existing facilities in Hospitals as they are set up at present, without creation of new Clinics which would duplicate the present facilities.

Second, that each disabled person should be seen by his own doctor before being referred to these Clinics. The Society for Crippled Children claim that this has been done in the past in regard to children, but there have been a few exceptions.

Third, that this wealth of Clinical material be made use of in training doctors and students and that the patients be considered as Staff patients rather than Ward of the Society or Government. I also feel that the Medical care for these patients should be paid for by the Society for their examination of patients on a pro rata basis for each doctor concerned.

It is very apparent that the Society has increased tremendously in the number of children cared for in the past five years

Ne Plus Ultra IN

CORTICOSTEROID THERAPY



Deltacortril^{*}

BRAND OF PREDNISOLONE
tablets as scored, 5 mg. oral tablets

Potent analog of hydrocortisone; antirheumatic, antiallergic, antiphlogistic; effective even where other steroids fail; virtually devoid of major hormonal reactions

topical

Cortril^{*}

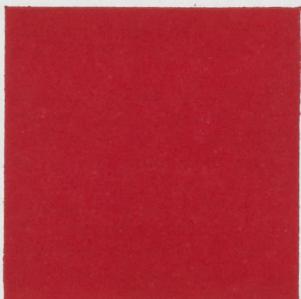
BRAND OF HYDROCORTISONE

topical ointment 1.0% and 2.5%

acetate ophthalmic ointment 0.5% and 2.5%

Unsurpassed anti-inflammatory, antiallergic therapy for dermatitis or superficial eye disorders

acetate aqueous suspension for intra-articular injection 25 mg. per cc.
Local antirheumatic therapy of choice in arthritic joints — without systemic effects



topical combination

Terra-Cortril^{*}

BRAND OF OXYTETRACYCLINE HYDROCHLORIDE AND HYDROCORTISONE

topical ointment containing 3% TERRAMYCIN*† and 1% CORTRIL

ophthalmic suspension containing 5 mg. TERRAMYCIN and 15 mg. CORTRIL per cc.

Combined anti-infective, anti-inflammatory therapy for skin and eye disorders of infectious origin or those complicated or threatened by secondary microbial invasion; unites the established antibiotic range and the therapeutic and prophylactic predictability of TERRAMYCIN with the outstanding topical activity of CORTRIL



World's Largest Producer of Antibiotics VITAMIN-MINERAL FORMULATIONS HORMONES

P F I Z E R C A N A D A Division of Pfizer Corporation, Montreal 9, P.Q.

and that the treatment of disabled adults will closely parallel this pattern.

From my observation of the Society's activities, patients are not only reached medically but they are rehabilitated to a point where they have been able to place a great proportion in jobs, so that they have become self supporting.

Respectfully submitted.

*Donald J. Hastings,
Chairman.*

49.

Workmen's Compensation Board Medical Board of Reference

To the President and Executive of
The Manitoba Medical Association:

During the past year (October 1, 1954, to September 30, 1955) your Committee was convened on 18 occasions to review the medical status of 41 claimants. No undue difficulties were encountered.

Respectfully submitted.

*C. E. Corrigan,
Chairman.*

50.

Workmen's Compensation Board Negotiating Committee

To the President and Executive of
The Manitoba Medical Association:

The Negotiating Committee of the Manitoba Medical Association to the Workmen's Compensation Board, held several meetings during the term. A notice was posted in the Manitoba Medical Review asking for suggestions to be considered by the Committee, for discussion with the Workmen's Compensation Board.

Commissioner Cousley, Q.C., of the Workmen's Compensation Board, reported only two cases in which the medical member and the Workmen's Compensation Board were not in accord. On investigation of these cases, it was found that the doctors had been misinformed by fellow members in interpreting the regulations of the Workmen's Compensation Board according to the Schedule of Fees. The difficulties were soon dispersed after a satisfactory explanation to the members concerned.

In addition to the several meetings held by the Negotiating Committee of the M.M.A. and the Committee from the W.C.B., your Chairman and Commissioner Cousley met on several occasions to settle some of the minor details.

We are presenting a new Schedule of Fees, to become effective on January 1, 1956. There are several items which I will explain in detail at the Annual Meeting. I know that every medical member will be proud of the concessions granted to us by the Workmen's Compensation Board. They were very fair in their dealings with the Negotiating Committee from the Manitoba Medical Association. I cannot speak too highly of the courtesy and consideration received from Commissioner Cousley, Q.C., the Board members and D. J. Fraser, C.M.O.

May I take this opportunity to thank the members of my Committee and our Executive Secretary, M. T. Macfarland, M.D., for many hours of laborious work.

Respectfully submitted.

*P. H. McNulty,
Chairman.*

51.

Eye, Ear, Nose and Throat

To the President and Executive of
The Manitoba Medical Association:

Since the last report the Eye, Ear, Nose and Throat Section has held five meetings.

At these meetings a number of papers have been presented. Dr. J. McGillivray presented a paper on "Visual Problems in

School Children." Miss Shirtliff and Dr. Robert MacNeil reported on the work of the Speech and Hearing Clinic of the Children's Hospital. Dr. Walter Alexander read a paper dealing with the Neuro-anatomy and Physiology of the Auditory Apparatus. Dr. A. Lindsay presented a paper on "Myopia."

Respectfully submitted.

*Stewart McKenty,
Secretary.*

52.

Psychiatric Section

To the President and Executive of
The Manitoba Medical Association:

During the year 1954-55, three meetings were held by our section.

The highlight of the October, 1954, meeting in Winnipeg, was the announcement of the establishment of a Department of Psychiatry in the Medical School with Dr. G. C. Sisler as Professor of Psychiatry.

The meeting at the Manitoba School, in January, 1955, was devoted to three papers dealing with clinical activities at the school and a comprehensive discussion of psychiatric undergraduate training.

At the final meeting at Brandon in June, 1955, our section agreed to apply for a loose affiliation with the Canadian Psychiatric Association, and accepted as associate members thirteen non-medical workers who were closely associated with psychiatric activities in the province. During the scientific session, two excellent papers were read, one on Largactil, the other describing the research program in Schizophrenia being carried on in Saskatchewan.

The following officers were elected for the year 1955-56, Chairman, Dr. T. A. Pincock; Vice-Chairman, Dr. G. M. Stephens; Secretary-Treasurer, Dr. J. H. Lindsay.

Respectfully submitted.

*J. H. Lindsay,
Secretary-Treasurer.*

53.

Surgical Section

To the President and Executive of
Manitoba Medical Association:

The Surgical Section of the Manitoba Medical Association, according to usual practice, had three scientific dinner meetings during the 1954-55 session.

1. Date: Thursday, October 21st, 1954.
Speaker: Doctor Heim de Balsac.
Subject: "Surgery of Acquired Heart Disease."
2. Date: Thursday, November 25th, 1954.
Speaker: Sir James Learmonth.
Subject: "Some Surgical Experiences."
3. Date: Monday, April 4th, 1955.
Speaker: Doctor Charles B. Ripstein.
Subject: "The Management of Oesophageal Varices."

In addition, two business meetings were held in relation to fees. An orthopaedic schedule outlining the various procedures carried out by the orthopaedic surgeons was submitted to the executive of the M.M.A.

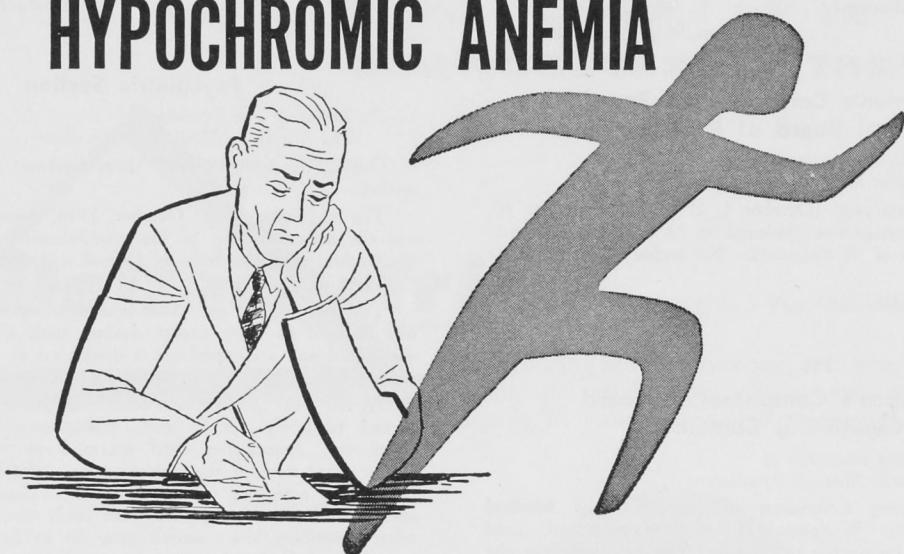
At the final meeting of the current session, Doctor M. R. MacCharles was re-elected president, and Doctor L. R. Rabson was re-elected secretary-treasurer.

To complete the 1955 session, Dr. J. T. Priestley, of the Mayo Clinic, Rochester, will address this Section on "Surgical Diseases of the Adrenal Glands," on Tuesday, October 25th.

Respectfully submitted.

*L. R. Rabson,
Sec.-Treas.*

for the treatment of
HYPOCHROMIC ANEMIA



"PROHEMA"

Brand of iron, vitamins and liver concentrate.

- Produces response in many patients resistant to treatment with iron alone.
- Corrects associated deficiencies of dietary origin.

For those cases of secondary anemia showing evidence of faulty erythrocyte maturation.

"PROHEMA" COMPOUND
 Tablet No. 433 *Frost*
 (Coloured Pink)

Each sugar-coated tablet contains:
 The same formula as Tablet No. 432 with the addition of:
 Vitamin B₁₂..... 2.5 mcg.
 Folic acid..... 0.67 mg.

"PROHEMA"

Tablet No. 432 *Frost*
 (Coloured Red)

Each sugar-coated tablet contains:

Ferrous sulphate (exsic.).....	0.3 G.
Copper sulphate.....	1.6 mg.
Thiamine Hydrochloride.....	1 mg.
Riboflavin.....	1 mg.
Niacinamide.....	10 mg.
Ascorbic acid.....	25 mg.
Vitamin D.....	333 I.U.
Liver fraction 2, N.F.....	67 mg.

DOSAGE: One tablet, three times daily. **PACKAGED IN:** Bottles of 100 tablets.

Charles E. Frost & Co.

MONTRÉAL

CANADA

Department of Health and Public Welfare
Comparisons Communicable Diseases — Manitoba (Whites and Indians)

DISEASES	1955		1954		Total	
	Sept. 11 to Oct. 8, '55	Aug. 14 to Sept. 10, '55	Sept. 5 to Oct. 2, '54	Aug. 8 to Sept. 4, '54	Jan. 1 to Oct. 8, '55	Jan. 1 to Oct. 2, '54
Anterior Poliomyelitis	4	10	9	14	25	115
Chickenpox	27	13	87	49	918	1374
Diphtheria	0	0	0	0	1	0
Diarrhoea and Enteritis, under 1 year	9	23	12	9	78	141
Diphtheria Carriers	0	0	0	0	2	0
Dysentery—Amoebic	0	0	0	0	0	0
Dysentery—Bacillary	17	0	1	2	25	20
Dysentery—Bacillary Carrier	0	0	0	0	0	1
Erysipelas	0	2	3	3	9	25
Encephalitis	0	0	1	3	0	5
Influenza	6	22	3	6	202	79
Measles	119	25	37	63	2164	871
Measles—German	1	4	0	0	63	14
Meningococcal Meningitis	0	1	6	2	12	22
Mumps	36	24	36	28	948	959
Ophthalmia Neonatorum	0	0	0	0	1	0
Puerperal Fever	1	0	0	0	1	0
Scarlet Fever	11	5	27	6	140	428
Septic Sore Throat	1	1	4	4	18	48
Smallpox	0	0	0	0	0	0
Tetanus	0	0	0	0	0	2
Trachoma	0	0	0	0	0	0
Tuberculosis	45	68	61	83	441	655
Typhoid Fever	5	0	0	0	6	3
Typhoid Paratyphoid	0	0	0	0	0	0
Typhoid Carriers	0	0	0	0	0	0
Undulant Fever	0	1	0	0	6	7
Whooping Cough	48	60	71	35	567	155
Gonorrhoea	114	137	103	113	781	1024
Syphilis	5	7	6	11	72	81
Jaundice Infectious	35	25	24	22	258	292
Tularemia	0	0	0	0	2	2

Four-week Period August 14th to September 10th, 1955

DISEASES (White Cases Only)	*828,000 Manitoba	*861,000 Saskatchewan	*2,825,000 Ontario	*2,952,000 Minnesota
*Approximate population.				
Anterior Poliomyelitis	4	10	28	110
Chickenpox	27	5	238	...
Diarrhoea & Enteritis, under 1 yr.	9	19	...	...
Diphtheria	...	...	...	3
Diphtheria Carriers	...	...	...	...
Dysentery—Amoebic	...	...	1	...
Dysentery—Bacillary	17	1	16	17
Encephalitis Infectious	...	4	...	...
Erysipelas	...	3	...	...
Influenza	6	...	16	8
Jaundice Infectious	35	53	28	75
Measles	119	6	319	11
German Measles	1	...	69	...
Meningitis Meningococcus	...	3	9	2
Mumps	36	...	381	...
Ophthal. Neonat.	...	...	...	...
Puerperal Fever	1	...	...	...
Scarlet Fever	11	5	84	11
Septic Sore Throat	1	14	2	28
Smallpox	...	...	...	...
Tetanus	...	...	...	...
Trachoma	...	...	...	...
Tuberculosis	45	38	91	107
Tularaemia	...	1	...	...
Typhoid Fever	5	1	3	...
Typh. Para. Typhoid	...	1	...	...
Typhoid Carrier	...	1	2	4
Undulant Fever	...	1	2	4
Whooping Cough	48	110	229	27

DEATHS FROM REPORTABLE DISEASES

October, 1955

Urban—Cancer, 66; Pneumonia (other forms), 6; Tuberculosis, 4. Other deaths under 1 year, 24. Other deaths over 1 year, 192; Stillbirths, 14. Total, 306.

Rural—Cancer, 34; Pneumonia, Lobar (490), 1; Pneumonia (other forms), 8; Tuberculosis, 4; Diarrhoea & Enteritis, 3; Meningococcal Infections, 1. Other deaths under 1 year, 18. Other deaths over 1 year, 153. Stillbirths, 10. Total, 232.

Indians—Pneumonia (other forms), 2; Diarrhoea & Enteritis, 1. Other deaths under 1 year, 1. Other deaths over 1 year, 3. Stillbirths, 2. Total, 9.



Anterior Poliomyelitis—Definitely not an epidemic year unless it comes in the winter!

Typhoid Fever—Five cases reported in this period — three brothers and a sister in one family near Amaranth and one young man in the City of Winnipeg. The mother of the four children had typhoid some years ago and is being checked for the possibility of being a carrier. No source has been found for the infection of the Winnipeg case. Single cases are very difficult to trace.

Venereal Diseases show a slight decrease. We hope that all cases of Gonorrhoea are being reported. It is so easy to give treatment and forget to report but we cannot trace infections and get the source under treatment unless we are notified.

Medical Doctor Required

A new five bed hospital requires a Medical Doctor. Good district in western Manitoba. Hospital district population 2,000. Summer resort. For further information write to Secretary, Mike Kowalchuk, Sandy Lake Medical Nursing Unit 8 B, Sandy Lake, Manitoba.

R E M E M B E R**Winnipeg Medical Society
BENEVOLENT FUND**

Subscriptions may be sent to
604 Medical Arts Building

Detailmen's Directory

Representing Review Advertisers in this issue, whose names are not listed under a business address.

Abbott Laboratories

G. J. Bowen	4-4559
R. G. (Bud) Harman	50-7509
Alan (Al) M. Grant	20-7289
Bruce Hunter	42-5263

Ayerst, McKenna and Harrison

W. R. Card	40-7115
C. G. Savage	SU3-4558
R. A. E. Perrin	42-4703
Jack R. Ostrow	52-3242

British Drug Houses

F. J. Burke	44-4991
W. B. Pipes	42-2023
W. S. Langdon	43-1325

Ciba Company Ltd.

Leslie D. MacLean	6-1242
Ralph L. Whitfield	43-0163

Connaught Laboratories

Brathwaites Ltd.	92-2635
------------------	---------

Frosst, Chas. E.

W. M. Lougheed	40-3963
W. J. McGurran	20-8231
E. R. Mitchell	40-2132

Horner, Frank W. Limited

Richard Briggs	43-0431
Jos. Lavitt	59-1691
Linc. Sveinson	43-0072

Mead Johnson

Robert Henderson	42-6947
------------------	---------

Merrell Co., The Wm. S.

F. G. Granger	83-2811
---------------	---------

Nadeau Laboratory Ltd.

Andrew Desender	Tyndall, Man.
-----------------	---------------

Modern Offices For Rent

Spacious Modern Offices in Choice Locality. Ideal for Specialists and Generalists. Excellent existing facilities. Worth your while investigating. Broadway Medical Building, 263 Broadway Ave.

Office Space Available

Office space available finished to individual specifications for doctors, dentists, group of doctors or clinic in a modern building under construction at 1151 Pembina Highway, in the Municipality of Fort Garry. Occupancy by May 1st, 1956. Apply to Hugh B. Parker, 5th floor, The Canadian Bank of Commerce Chambers, 389 Main Street, Winnipeg 2, Manitoba. Phone 92-3561.

Park, Davis & Co.

L. W. Curry	40-1138
B. S. Fleury	40-4441

Pfizer Canada

E. E. Conway	6-4274
Paul Thurston	ED1-1834

Poulenc Limited

W. J. Plumpton	4-5561
----------------	--------

A. H. Robins (Canada) Ltd.

Norman Haldane	72-5961
----------------	---------

Sandoz Pharmaceuticals Ltd.

H. D. Robins	SU3-9936
--------------	----------

Schmid, Julius

W. H. Davis	20-6941
-------------	---------

G. D. Searle & Co.

Harry Chambers	50-6558
----------------	---------

Sharp & Dohme (Canada) Ltd.

W. G. Ball	4-5702
Noel J. Pritchard	40-1162
E. J. Strimbicki	74-0302

Shuttleworth, E. B.

S. M. Fairclough	SU 3-0156
A. E. (Bert) Pauwels	93-1652

Squibb & Son, E. R.

J. H. Don MacArthur	40-4741
M. G. Waddell	4-1552

Warner-Chilcott Labs.

A. L. (Andy) Argue	6-1619
--------------------	--------

Will, Chas. R.

A. C. Payne	83-2055
-------------	---------

Winthrop-Stearns

R. M. Kelly	40-6459
Russell B. Ferguson	4-9437

Wyeth & Bro., John

A. W. Cumming	40-5694
Stuart Holmes	23-5523

Index - Volume 35 - Manitoba Medical Review - 1955

Authors

		Volume	No.	Page
Abbott, A. C.	Cholografin	XXXV	5	288
Adamson, Gilbert L.	Electroshock	XXXV	1	14
Adamson, J. D.	Concepts of Bronchiectasis	XXXV	2	76
Andison, A. W.	Obstetrics and Gynaecology — 1955	XXXV	10	631
Austmann, K. J.	Laryngoscope, The Hundredth Anniversary of the	XXXV	10	624
Barsky, Percy	Allergy in Relation to Pediatrics	XXXV	1	12
Benoit, C. F.	The Fundus Oculi in Diabetes and Hypertension	XXXV	9	567
Best, B. W.	Obstetrics and Gynaecology — 1955	XXXV	10	631
Bondar, Marilyn	Cytological Diagnosis	XXXV	9	565
Berger, S. S.	The Office Treatment of Acne Scars	XXXV	6	356
Black, Elinor F. E.	Dysfunctional Uterine Bleeding	XXXV	8	494
Bowman, Maxwell	History of Poliomyelitis in Manitoba	XXXV	6	339
Bowman, W. D.	Fetal Salvage Following Previous Stillbirths in Hemolytic Disease of the New Born	XXXV	7	420
Briggs, J. N.	The Hyaline Membrane Syndrome	XXXV	3	138
Cantlon, R.T., Valerie	Coronary Artery Atherosclerosis	XXXV	6	351
Chute, A. L.	Problems in the Management of Juvenile Diabetes	XXXV	7	416
Cohen, Morley	Recent Advances in the Surgery of Congenital Heart Disease	XXXV	8	489
Cooke, Robert L.	Surgery — 1955	XXXV	10	619
Cooke, Robert L.	Tumours of the Thymus	XXXV	4	204
De Pape, A. J.	Infection of the Newborn	XXXV	5	283
Friesen, W. J.	Three Consecutive Ectopic Pregnancies in the Same Patient	XXXV	3	137
Gibson, Alexander	Congenital Dislocation of the Hip Joint and Inadequate Acetabulum	XXXV	8	505
Gibson, Alexander	Dr. John Brown	XXXV	1	26
Glazebrook, A. J.	Cholografin	XXXV	5	288
Glazebrook, A. J.	Cytological Diagnosis	XXXV	9	565
Grace, A. J.	Cancer of the Colon	XXXV	6	333
Green, Paul	Coronary Artery Atherosclerosis	XXXV	6	351
Guyot, H.	Shoulder Dystocia as a Cause of Fetal Death	XXXV	8	509
Hastings, James R.	Cholografin	XXXV	5	288
Hogg, Georgina R.	Kernicterus	XXXV	9	575
Houston, A. B.	Mysoline in Epilepsy	XXXV	3	134
Hughes, Harley	An Anatomical Description of the Pelvic Floor	XXXV	1	18
Hunt, T. E.	The Importance of Rehabilitation in Medical Practice Today	XXXV	8	483
Kagan, J. M.	Cold Injuries	XXXV	9	557
Kramer, Simon	Progress in Radiotherapy	XXXV	4	221
Lauer, Ron	Heart Failure in Childhood (Part I)	XXXV	4	215
Lauer, Ron	Heart Failure in Childhood (Part 1 Continued)	XXXV	5	293
Little, Adam S.	Clinical and Therapeutic Aspects of Sprue	XXXV	4	197
Loadman, B. E.	Recent Advances in the Treatment of Scoliosis	XXXV	10	623
Malkin, S.	Megaloblastic Anemia of Pregnancy	XXXV	9	553
MacKinnon, W. B.	The Use and Abuse of Rest in Orthopedic Treatment	XXXV	9	561
Majury, A. S.	Obstetrics and Gynaecology — 1955	XXXV	10	631
Martin, J. H.	Manifestations of Liver Failure	XXXV	5	270
McCreath, N. D.	Gastroscopy	XXXV	6	348
McCartan, James	Spontaneous Rupture of the Bladder During Labour	XXXV	8	498
McFarlane, R. H.	Peptic Ulcer Occurring During Cortisone Therapy: With Case Report	XXXV	9	549
Medovy, Harry	Paediatrics	XXXV	10	628
Minuck, Max	Modern Methods of Assessing the Patient for Surgery	XXXV	2	78
Mustard, Robert A.	Cancer of the Neck	XXXV	7	411
Orgryzlo, M. A.	The Present Status of ACTH, Cortisone and Hydrocortisone in the Treatment of Rheumatoid Arthritis	XXXV	7	401
Parkinson, Dwight	Non Traumatic Problems	XXXV	5	272
Pincock, J. G.	The Role of the General Practitioner in Rehabilitation	XXXV	8	487
Quinlivan, W. L.	The Treatment of Genital Prolapse	XXXV	5	276
Rogers, A. G.	Pheochromocytoma, A Curable Case of Hypertension	XXXV	7	405
Rubin, Leon	Obstetrics and Gynaecology — 1955	XXXV	10	631
Rubin, Leon	The Management of Pregnancy in the Cardiac Patient	XXXV	4	209
Schmidt, Walter R.	Injury to the Intrathoracic Viscera from Non-Penetrating Wounds of the Chest	XXXV	7	407
Sisler, C. George	Psychiatric Treatment Units in General Hospitals	XXXV	5	267
Stanfield, F. J.	Virus Encephalomyelitis	XXXV	6	357
Swartz, Melville J.	Translumbar Aortography in Renal Disease	XXXV	9	564
Whytehead, L. L.	Progress in Thoracic Surgery — 1955	XXXV	10	621
Wilson, Roger	Benign Esophageal Obstruction	XXXV	1	9
Wilson, Roger	Carcinoma of the Stomach	XXXV	3	131
Wilt, J. C.	Virus Encephalomyelitis	XXXV	6	357
Willows, Ross L.	The Early Diagnosis of Cancer of the Cervix	XXXV	8	496

Clinical Articles

	Volume	No.	Page
Acne Scars, The Office Treatment of, S. S. Berger	XXXV	6	356
Atherosclerosis, Coronary Artery, Paul Green and Valerie Cantlon, R.T.	XXXV	6	351
Bronchiectasis, Concepts of, J. D. Adamson	XXXV	2	76
Brown, Dr. John, Alexander Gibson	XXXV	1	26
Cancer of the Cervix, The Early Diagnosis of, Ross L. Willows	XXXV	8	496
Cancer of the Colon, A. J. Grace	XXXV	6	333
Cancer of the Neck, Robert A. Mustard	XXXV	7	411
Carcinoma of the Stomach, Roger Wilson	XXXV	3	131
Cholografin, A. J. Glazebrook, A. C. Abbott and R. Hastings-James	XXXV	5	288
Cold Injuries, J. M. Kagan	XXXV	9	557
Cytological Diagnosis, A. J. Glazebrook, Marilyn Bondar	XXXV	9	565
Diabetes, Problems in the Management of Juvenile, A. L. Chute	XXXV	7	416
Ectopic Pregnancies in the Same Patient, Three Consecutive, W. J. Friesen	XXXV	3	137
Electroshock, Gilbert L. Adamson	XXXV	1	14
Encephalomyelitis, Virus, J. C. Wilt and F. J. Stanfield	XXXV	6	357
Epilepsy, Mysoline in, A. B. Houston	XXXV	3	134
Esophageal Obstruction, Benign, Roger Wilson	XXXV	1	9
Fetal Death, Shoulder Dystocia as a Cause of, H. Guyot	XXXV	8	509
Fetal Distress, A. C. McInnis	XXXV	10	627
Fundus Oculi in Diabetes and Hypertension, C. F. Benoit	XXXV	9	567
Gastroscopy, N. D. McCreath	XXXV	6	348
Genital Prolapse, The Treatment of, W. L. Quinlivan	XXXV	5	276
Gynecology, Office, John H. Moore	XXXV	2	67
Heart Disease, Recent Advances in the Surgery of Congenital, Morley Cohen	XXXV	8	489
Heart Failure in Childhood (Part I), Ron Lauer	XXXV	4	215
Heart Failure in Childhood (Part I Con't), Ron Lauer	XXXV	5	293
Hemolytic Disease of the Newborn, Fetal Salvage Following Previous Stillbirths in, W. D. Bowman	XXXV	7	420
Hip Joint and Inadequate Acetabulum, Congenital Dislocation of the, Alexander Gibson	XXXV	8	505
Hyaline Membrane Syndrome, The, J. N. Briggs	XXXV	3	138
Infection of the Newborn, A. J. De Pape	XXXV	5	283
Intrathoracic Viscera from Non-Penetrating Wounds of the Chest, Injury to the, Walter Robert Schmidt	XXXV	7	407
Kernicterus, Georgina R. Hogg	XXXV	9	575
Laryngoscope, The Hundredth Anniversary of the, K. J. Austmann	XXXV	10	624
Liver Failure, Manifestations of, J. H. Martin	XXXV	5	270
Megaloblastic Anemia of Pregnancy, S. Malkin	XXXV	9	553
Obstetrics and Gynaecology — 1955, Drs. Leon Rubin, A. W. Andison, A. S. Majury	XXXV	10	631
Orthopedic Treatment, The Use and Abuse of Rest, W. B. MacKinnon	XXXV	9	561
Pediatrics — 1955, Harry Medovy	XXXV	10	628
Pediatrics, Allergy in Relation to, Percy Barsky	XXXV	1	12
Pelvic Floor, An Anatomical Description of the, Harley Hughes	XXXV	1	18
Peptic Ulcer Occurring During Cortisone Therapy: With Case Report, R. H. McFarlane	XXXV	9	549
Pheochromocytoma, A Curable Cause of Hypertension, A. G. Rogers	XXXV	7	405
Placentae, Abruptio, James R. Mitchell	XXXV	4	212
Poliomyelitis in Manitoba, History of, J. D. Adamson and Maxwell Bowman	XXXV	6	339
Psychiatric Treatment Units in General Hospitals, George C. Sisler	XXXV	5	267
Radiotherapy, Progress in, Simon Kramer	XXXV	4	221
Rehabilitation in Medical Practice Today, The Importance of, T. E. Hunt	XXXV	8	483
Rehabilitation, The Role of the General Practitioner in, J. G. Pincock	XXXV	8	487
Renal Disease, Translumbar Aortography in, Melville J. Swartz	XXXV	9	564
Rheumatoid Arthritis, The Present Status of ACTH, Cortisone and Hydrocortisone in the Treatment of, M. A. Ogryzlo	XXXV	7	401
Rupture of the Bladder During Labour, Spontaneous, James McCarten	XXXV	8	498
Scoliosis, Recent Advances in the Treatment of, B. E. Loadman	XXXV	10	623
Sprue, Clinical and Therapeutic Aspects of, Adam S. Little	XXXV	4	197
Surgery — 1955, Robert L. Cooke	XXXV	10	619
Thoracic Surgery — 1955, Progress in, L. L. Whytehead	XXXV	10	621
Thymus, Tumours of the, Robert L. Cooke	XXXV	4	204
Traumatic Problems, Non, Dwight Parkinson	XXXV	5	272
Uterine Bleeding, Dysfunctional, Elinor F. E. Black	XXXV	8	494

Editorial

Annual Meeting, S. Vaisrub	XXXV	8	521
American Medical Association's Public Relations, L. A. Sigurdson	XXXV	8	521
Call System, L. A. Sigurdson	XXXV	1	41
Conjoint B.M.A., C.M.A., O.M.A. Meeting	XXXV	6	365
Distant Fields, S. Vaisrub	XXXV	2	93
Early Medical Journals in Manitoba, Ross Mitchell	XXXV	1	39
Exit — 1955, S. Vaisrub	XXXV	10	643
Failure in Medicine, S. Vaisrub	XXXV	5	301
Fundus Oculi, S. Vaisrub	XXXV	9	589
Government in Sickness Insurance, L. A. Sigurdson	XXXV	5	303

Editorial (Continued)

	Volume	No.	Page
Health Insurance, L. A. Sigurdson	XXXV	4	234
Hospital Case Records, L. A. Sigurdson	XXXV	10	645
Legislation, L. A. Sigurdson	XXXV	3	150
Medico-Legal Society, S. Vaisrub	XXXV	4	233
Manitoba Medical Service: Fee Schedule, L. A. Sigurdson	XXXV	7	438
Medical History, S. Vaisrub	XXXV	6	363
Mental Retardation, L. A. Sigurdson	XXXV	9	590
Neonatal Mortality, S. Vaisrub	XXXV	3	149
Questions and Answers, S. Vaisrub	XXXV	10	644
Refresher Course, S. Vaisrub	XXXV	3	149
Rehabilitation, L. A. Sigurdson	XXXV	2	93
Rehabilitation, S. Vaisrub	XXXV	8	521
Relations: Public, Semipublic, Private, S. Vaisrub	XXXV	7	437
The Business Manager, M. T. Macfarland	XXXV	1	40
Society for Crippled Children, L. A. Sigurdson	XXXV	6	365
Trans-Canada Medical Service, L. A. Sigurdson	XXXV	7	437

Articles

Doctor-Patient Relationship in Diseases of Serious Prognosis, W. Karlinsky	XXXV	7	425
Minnesota-Dakota-Manitoba Orthopedic Society Report	XXXV	9	601

Letters to the Editor

A Three Year Review of Stillbirths	XXXV	4	235
A Three Year Review of Stillbirths (Reply)	XXXV	4	235
Cardiac Registry and School of Health Program	XXXV	9	593
How Much Does a Backache Cost?	XXXV	3	150
Krebiozen	XXXV	2	94
Manitoba Medical Service — Comments from Members	XXXV	9	592
Patient-pattern Types, M. Y. Alterego	XXXV	8	522
The Workmen's Compensation Board Schedule	XXXV	2	94
Winnipeg Medical Society, Benevolent Fund	XXXV	7	438

Case Reports

Actinomycosis in Lower Jaw, Glen F. Hamilton	XXXV	9	569
Cancer in Otolaryngology, Jack A. Rubin	XXXV	8	513
Cancer of the Pancreas, Mimicking Duodenal Diverticulitis, A. J. Glazebrook, Y. N. Joubert	XXXV	7	414
Cancer of the Stomach, Diagnosed by Cytology, Marilyn Bondar, A. J. Glazebrook	XXXV	8	514
Carcinoma of the Stomach Diagnosed by Gastroscopy, A. J. Glazebrook and Peter Sheldon	XXXV	6	359
Mitral Commissurotomy Preliminary to Removal of a Bronchogenic Cyst, James S. McGoey	XXXV	5	280
Tetanus, Two Cases of, A. J. Elliott	XXXV	1	28

Clinico-Pathological Conference

Clinico-Pathological Conference No. 117, Deer Lodge Hospital	XXXV	3	140
Cytomegalic Inclusion Disease, Children's Hospital	XXXV	1	33

Obituaries

Beaton, W. G.	XXXV	5	305
Breidenbach, Lambert	XXXV	1	53
Conklin, John Henry	XXXV	8	522
Cooke, Robert Judson	XXXV	1	53
Cantelon, Adam Ernest	XXXV	7	446
Funk, Henry	XXXV	10	645
Kobrinsky, Solomon	XXXV	3	171
Lamont, Joseph Laurie	XXXV	9	599
Micay, Harry	XXXV	1	53
Peake, William Henry Thorpe	XXXV	7	446
Scott, Herbert John	XXXV	7	446
Stevenson, William Free	XXXV	7	446
Strong, Condren Maurice	XXXV	7	446
Thomson, John Richard	XXXV	10	645
Wheeler, Thomas Digby, An Appreciation	XXXV	9	598
Wheeler, Thomas Digby	XXXV	9	599

Association Page

	Volume	No.	Page
Hail and Farewell	XXXV	1	45
District Medical Society Report	XXXV	1	45
Income Tax Information	XXXV	2	107
Northwestern District Medical Society Meeting	XXXV	2	109
Dr. S. Vaisrub Appointed Review Editor	XXXV	3	155
Acting President	XXXV	3	155
Nominations to the Board of Trustees, M.M.S.	XXXV	3	155
Representatives to General Council, C.M.A.	XXXV	3	155
Expenses of Executive Committee Members	XXXV	3	155
Hospital Relations	XXXV	3	155
Public Relations	XXXV	3	156
Manitoba Medical Service Membership and Procedure Committee	XXXV	3	156
North of 53 District Medical Society Meeting	XXXV	4	241
Report of Nominating Committee	XXXV	7	441
Northern District Medical Society Meeting	XXXV	7	441
Brandon and District Medical Association Meeting	XXXV	7	441

Manitoba Medical Association

Presidential Address, Walter Tisdale	XXXV	2	99
1955 Committee Reports	XXXV	10	653

Winnipeg Medical Society

Committee Reports	XXXV	7	449
-------------------------	------	---	-----

General Practitioners' Association

Executive Meeting	XXXV	1	55
Post Graduate Lectures	XXXV	4	241
Report of Meeting	XXXV	7	442

Manitoba Medical Service

Report to Annual Meeting of the M.M.A., P. H. T. Thorlakson	XXXV	3	169
---	------	---	-----

College of Physicians and Surgeons

Registration Committee	XXXV	1	47
Minutes of Meeting	XXXV	1	48
Specialist Register	XXXV	1	53
Council Meeting, Registrar's Report	XXXV	2	113
Council Meeting	XXXV	3	161
Council Meeting Report (Cont.)	XXXV	4	245
Council Meeting Report (Cont.)	XXXV	5	311
Council Meeting Report (Cont.)	XXXV	6	377
Council Meeting Report (Cont.)	XXXV	7	461
Council Meeting Report (Cont.)	XXXV	8	527

Medical History

Three Inquests of Historical Interest, Part I, Athol Gordon	XXXV	6	366
Three Inquests of Historical Interest, Part II, Athol Gordon	XXXV	7	430
"1855," Part I, J. D. Adamson	XXXV	9	583

Medico-Legal

Memory and Some of Its Abnormalities, A. T. Mathers	XXXV	4	225
The Role of the Pathologist in Medico-Legal Problems, D. W. Penner	XXXV	10	634

UNCLASS V-35 1955
MANITOBA MEDICAL REVIEW

PERIODICAL P3 40820159 HLTHSC



000038018552

Date Due

567826

MEDICAL SCIENCES

Med. Manitoba medical review.
Per.
v.35
1955

B15868